Draft Environmental Impact Statement/Report &

4 (f) Evaluation

Lincoln Bypass
Placer County,
State Route 65

KP R19.6/R38.3 PM R12.2/R23.8 Report Number: FHWA-CA-EIS xx-xx-xx

SCH Number 199090020626 03-PLA 65, KP R19.6/R38.3 PM R12.2/R23.8 03-173-333800

Construct Four lanes on new right of way In Placer county,

from .03 km south of Industrial to Riosa Rd.

Draft Environmental Impact Statement Draft Environmental Impact Report and Section 4(f) Evaluation

Submitted Pursuant to:

California Environmental Quality Act, Div. 13, Public Resources Code And the National Environmental Policy Act, 42 U.S.C. 4332(2)(c) and 40 USC 303 By the

U.S. Department of Transportation, Federal Highway Administration *and*the State of California, Department of Transportation

Cooperating Agencies:

National Marine Fisheries Service U.S. Army Corps of Engineers U.S. Environmental Protection Agency U.S. Fish and Wildlife Service

Date Kome Ajise Date Michael E. Ritchie
Acting North Region Environmental Services Division Administrator
District 3 Division Planning Chief Federal Highway Administration
California Department of Transportation

The comment period for this document will close on January 15, 2002. The following persons may be contacted for additional information concerning this document.

Ken Van Velsor, Chief Caltrans, District 3 Environmental Management, S2 2800 Gateway Oaks Dr. Sacramento, CA 95833Team-North (916) 274-5803 Maiser Khaled Team Leader, Project Delivery Federal Highway Administration 980 9th St. Suite 400 Sacramento, CA 95814 (916) 498-5020

ABSTRACT: The FHWA and Caltrans propose to construct a four lane freeway around the city of Lincoln, in Placer County, from south of Industrial Blvd to north of Riosa Rd. The purpose of the project is to alleviate congestion within the city of Lincoln and provide for inter-regional movement of goods and services. Seven alternatives are being evaluated, including the "No Build" alternative. The estimated cost of this project is between \$151-194,000,000.

The proposed project could affect vernal pool fairy shrimp and tadpole shrimp, Swainson's hawk, Ahart's dwarf rush, Legenere, Bogg's Lake hedge hyssop, several bat species, valley elderberry longhorn beetle and numerous large oak trees, vernal pool habitat and agricultural land. The project will affect from 10 to 91 residences and between 123 to 214 acres of farmland. From 4.9 to 9.4 hectares of wetlands or waters of the U.S. could be affected.

Comments on this document are due by January 15, 2002. Please send comments to Ken Van Velsor, at the above address.

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S.1 Project Purpose & Need

The Department of Transportation (Department) and Federal Highway Administration (FHWA) propose to construct a four-lane freeway around the City of Lincoln, in Placer County (see Figure i). The project begins 0.3 km (0.5 mi) south of Industrial Blvd. and ends near Riosa Road. A map showing the alternatives is presented after the summary (See Figure ii). There are six alternatives; AAC2, A5C1, D1 and D13, D13 South Modification and D13 North Modification that are being evaluated in this document as well as a "No Build" alternative. The last two alternatives, D13 South Modification and D13 North Modification were developed in response to information gathered at the Open House held on September 22, 1999.

A number of additional alternatives were also evaluated, but discarded for various reasons. These are discussed at the end of Chapter 2.

Approval of this Environmental Impact Statement / Report and the subsequent Record of Decision issued by the FHWA would allow for the acquisition of right-of-way

for the ultimate four-lane freeway and provide for conceptual approval and construction of interchange locations.

The purpose of the project is to relieve congestion and improve safety on existing State Route (SR) 65 in the vicinity of the City of Lincoln and provide for a regional traffic solution to accommodate projected traffic volumes for the year 2020. Traffic studies were completed with the 2025 year construction year in mind

Continuing growth in south Placer County and the Sacramento Valley has resulted in the need for a new and improved SR 65 corridor, which would alleviate congestion in the City of Lincoln while providing for improved inter-regional traffic flow. The existing facility through Lincoln is a "Main Street" highway, which will not serve the ultimate transportation needs of the region. Due primarily to congestion, the accident rate in downtown Lincoln is higher than the average rate for this type of facility. As traffic volumes continue to increase, SR 65 south of Lincoln and within downtown Lincoln is expected to exceed available capacity by the year 2005.

This project has been included in the 2000/01 Metropolitan Transportation Improvement Program (MTIP) and the 1999 Metropolitan Transportation Plan (MTP). On July 20, 2000, the Sacramento Area Council of Governments (SACOG) signed Resolution 29-2000 finding that the 2000/01 Metropolitan Transportation Improvement Program (MTIP) conforms to the 1994 State Implementation Plan (SIP) under the U.S. Environmental Protection Agency (EPA) conformity rule for the Sacramento ozone nonattainment area, carbon monoxide attainment area and particulate matter unclassified area. The conformity determination was signed by the Federal Highway and Federal Transit Administrations on October 5, 2000.

S.2 Brief Description of Project

The six build alternatives are of various lengths, ranging from 18.6 km to 20.6 km (11.6 to 12.8 miles). They are shown in Figure ii at the end of the Summary and described in Chapter 2.

The project begins just north of Industrial Boulevard (KP R19.6 [PM R12.2]) and ends near Riosa Road (KP R38.3 [PM 23.8]). All the "Build" alternatives begin at the same location and meet existing SR 65 at slightly different locations between Dowd Road and the Bear River. All of the alternatives descriptions begin on the south end of the project and are described south to north.

Due to funding constraints, the project could be built in stages: The minimum project staging includes a four-lane freeway commencing just north of Industrial Boulevard proceeding to the north to Nicolaus Road for the AC alternatives and northerly

to Nelson Lane for the D alternatives. An interchange would be constructed at Industrial Boulevard. North of Nelson Lane (for the D alternatives) or Nicolaus Road (for the AC alternatives), a two-lane facility would be constructed (and opened to traffic). At-grade intersections would be constructed at Nelson Lane, Nicolaus Road, Wise Road, Dowd Road and Riosa Roads for the first phase. As traffic congestion increases, additional lanes, the third and fourth, respectively, and interchanges would be constructed. The northbound roadbed will be constructed initially and operated as a two-lane conventional highway, until future construction provides for the parallel roadbed.

Following is a brief description of the alternatives being considered. Please refer to the map following the Summary.

S.2.1 Alternatives AAC2 and A5C1 (The AC Alignments)

The key feature of the AC alternatives is that they are located east of the airport. They both begin at Industrial Blvd. and end just before the Bear River. A5C1 and AAC2 split from the D alternatives just past Nicolaus Road, both following the same alignment until just past Wise Road. At that point, A5C1 swings further west than the AAC2 alternative, resulting in less impact on farmland. They join again at Riosa Road.

The minimum project is to build a four-lane freeway up to Nicolaus Road, and a two-lane road from Nicolaus Road to the end of the project. An interchange would be constructed at Nicolaus Road and at-grade intersections would be constructed at Wise Road and Riosa Road. Eventually, as traffic increases, interchanges would be constructed at Wise and Riosa Roads.

S.2.2 Alternative D1

The D1 and D13 alternatives are located west of the airport. The key feature that differentiates the D1 alternative from the similar D13 is that the D1 alternative would impact a small cluster of homes close to Nelson Lane, in the Rockwell subdivision. These homeowners gathered a petition of names in protest of this alignment.

After the D 1 alternative passes through the Rockwell subdivision, it ties back into the D 13 alternative.

S.2.3 Alternative D13

The D13 alternative was created in response to the homeowners protests to the D1 alignment and also as an effort to avoid environmentally sensitive areas. The D13 alignment avoids the Rockwell subdivision, making a wide turn around it. The D13 also affects less wetlands than the D1.

For the D1 and D13 alternatives, including the south and north modifications, atgrade intersections would be constructed at Nelson Lane, Nicolaus, Wise and Riosa

Roads. Eventually, as traffic increases, interchanges would be constructed at these locations.

The minimal project is to build a four-lane facility up to Nelson Road, and a twolane facility from Nelson to the end of the project.

S.2.4 Alternative D13 South Modification

Several attendees of the open house on September 22, 1999 suggested a modification of the D13 that blended the D1 with the D13. The result of this is the D13 South Modification. The purpose of this alignment is to create more distance between the residents in the Brookview subdivision and the proposed highway.

S.2.5 Alternative D13 North Modification

The D13 North Modification was developed in response to a potential wetland conservation easement on a parcel required for the project that could preclude the acquisition of this property for highway use.

The D 13 North Modification is identical to D 13 up to Wise Road. At Wise Road, the D13 North Modification makes a gentle curve just past Coon Creek and goes straight to SR 65 ending just past Sheridan.

S.2.6 No Build Alternative

The "No Build" alternative would be to not build the project. However, routine maintenance and operational improvements would continue. If the "No Build" alternative were chosen, congestion would continue in the City of Lincoln. The Level of Service would continue to deteriorate to a LOS F within the city limits. The safety of the traveling public and the residents of the town would be compromised due to the continuing congestion.

S.3 Other Major Actions In The Project Vicinity

The transportation corridor between Sacramento and Yuba City is currently under scrutiny for improvement with a number of highway improvements being evaluated for the area. In the immediate vicinity, SR 65 is being improved with widening and interchanges from Roseville to Lincoln. The parallel routes of SR 99 and 70 also have improvements such as widening and the addition of interchanges proposed. The goal of the Department is to have a network of four-lane freeways from I-80 in Roseville to north of Marysville/Yuba City. More information on this is offered in Chapter 1.

A summary of transportation projects in the area are listed in Table i.

Table i Transportation Projects in the Lincoln Area

Project	County	Year Constructed
SR 65 Improvement from Roseville to Industrial Blvd.	Placer	1997
Blue Oaks Interchange	Placer	1998
SR 193 improvements.	Placer	1999
Future Improvements to the State Highway System include:		Year Proposed
Wheatland Bypass	Sutter/Yuba	2006
SR 70, McGowen to Striplin widening	Sutter/Yuba	2005
SR 99 Improvements	Sutter	2003
Third River Crossing	Yuba	2004
Marysville Bypass	Yuba	2005
Placer Parkway*	Placer	Not Determined

^{*}Not part of the State Highway System

Other major non-transportation projects in the area include several residential developments such as Del Webb's Lincoln Sun City, the Regional Wastewater Treatment Plant in Lincoln and Teichert Mining operation near Coon Creek. Table ii describes these projects.

Table ii Development Proposals in the Lincoln Area

What	Where	Impacts	Details
Lincoln Air Center	Next to Airport	280 ha (700 ac)	Residential, industrial/business park, commercial use, golf course, park and public facilities.
3D Developments	Southwest of Lincoln	42 ha (104 ac)	Residential, floodplain preserve.
Lincoln Crossing	Southwest of	428 ha	Residential, business/professional/
	Lincoln	(1,070 ac)	commercial uses, parks and schools.
East Park	Southeast of	30 ha	Residential
Eust I uik	Lincoln	(76 ac)	Residential
Twelve Bridges	Southeast of	2282 ha	Residential some "age restricted"
(aka Sun City, Lincoln)	Lincoln	(5,706 ac)	commercial uses and golf course.
East Lake (aka Ferrari	Southeast of	152 ha	Residential, commercial, business-
Ranch)	Lincoln	(379 ac)	professional uses, public facilities
Lincoln Wastewater	East and west of	297.4 ha	Expansion to 2.4 million gallons daily.
Reclamation & Treatment Plant	Fiddyment Road	(735 ac)	Expansion to 2.4 minion ganons daily.
Teichert Aggregate	Between Lincoln &	1382 ha	400 ha (1000 ac) mining and processing
Facility	Sheridan	(3,455 ac)	area.

S.4 Summary Of Major Environmental Impacts

Table iii summarizes the potential environmental impacts of this project, including socioeconomic, cultural and natural resource impacts and funding. This table quantifies the impacts in each of these areas and puts these figures in table form for comparison.

Table iii Summary of Impacts

	A5C1 Alignment	AAC2 Alignment	D1 Alignment
Wetlands/	9.4 ha (23.1 ac)	6.3 ha (15.5 ac)	5.7 ha (14.1 ac)
Nonwetland	wetlands/waters	wetlands/waters	wetlands/waters
Waters	6.5 ha (16.1 ac) vernal	3.3 ha (8.0 ac) vernal	2.8 ha (6.8 ac) vernal
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	pool/swale	pool/swales	pool/swales
	2.2 ha (5.4 ac) of marsh	2.4 ha (6.0 ac) of marsh	2.6 ha (6.3 ac) of marsh
	two high value vernal pool	two high value vernal pool	one high value marsh
	complexes	complexes	
	1	1	
Special	Vernal pool fairy shrimp	Vernal pool fairy shrimp	Vernal pool fairy shrimp
Status	Ahart's dwarf rush	Ahart's dwarf rush	Raptor foraging and
Species	Raptor foraging and	Raptor foraging and	potential nesting habitat
	potential nesting habitat	potential nesting habitat	one high value marsh
	two high value vernal pool	two high value vernal pool	
	complexes	complexes	
Natural	80.1 ha (197.7 ac)	76.0 ha (187.7 ac)	48.4 ha (119.4 ac)
Communities	1	grassland/ vernal pool	grassland/vernal pool
Wildlife,	2.2 ha (5.4 ac) riparian	1.1 ha (2.6 ac) riparian	1.3 ha (3.2 ac) riparian
Fisheries	forest	forest	forest
	5.8 ha (14.3 ac) oak	10.2 ha (25.2 ac) oak	0.4 ha (0.9 acre) oak
	woodland	woodland	woodland
Water	185.8 ha (59.0 ac)	178.3 ha (440.6 ac)	182.8 ha (451.7 ac)
Quality	footprint with 11 stream	footprint with 11 stream	footprint with 9 stream
	crossings	crossings	crossings
C141	D	D t - f	D 11
Cultural	Requires small amount of	Requires small amount of	Requires small amount of
Resources	right-of-way from property eligible for National	right-of-way from property	right-of-way from property eligible for National
	Register.	eligible for National Register. Impacts to	Register.
	Register.	recorded archeological site	Register.
Agricultural	54.4 ha	51.1 ha	84.4 ha
Land	134.3 ac	126.1 ac	208.5 ac
Hazardous			
Waste	Potential	Potential	Potential
Land Use/	Residences: 91	Residences: 20	Residences: 20
Socio-	Businesses: 5	Businesses: 2	Businesses: 2
economics	Dusinesses. J		Dusinesses. 2
Cost	\$151 million	\$159 million (min)	\$194 million
		\$185 million (max)	

	D13 Alignment	D13 South Modified	D13 North Modified
Wetlands/ Nonwetland Waters	5.3 ha (13.1 ac) wetlands/waters 2.2 ha (5.4 ac) vernal pools/swales 2.8 ha (6.8) ac of marsh one high value marsh	6.8 ha (16.8 ac) wetlands/waters 2.4 ha (6.0 ac) vernal pool/swales 2.2 ha (5.5 ac) marsh	5.1 ha (13.8 ac) wetlands/waters 2.0 ha (4.9 ac) vernal pools/swales 2.5 ha (6.4) ac of marsh
Special Status Species	Vernal pool fairy shrimp Raptor foraging and potential nesting habitat one high value marsh	Vernal pool fairy shrimp Raptor foraging and potential nesting habitat	Vernal pool fairy shrimp Raptor foraging and potential nesting habitat
Natural Communities Wildlife, Fisheries	50.4 ha (123.3 ac) grassland/ vernal pool 1.3 ha (3.3 ac) riparian forest 3.5 ha (8.6 ac) oak woodland	52.5 ha (129.7 ac) grassland/ vernal pool 1.2 ha (3.0 ac) riparian forest 0.2 ha (0.4 ac) oak woodland	64.2 ha (158.7 ac) grassland/ vernal pool 1.3 ha (3.3 ac) riparian forest 3.5 ha (8.6 ac) oak woodland
Water Quality	198.9 ha (491.5 ac) footprint with 9 stream crossings	196.3 ha (485.2 ac) footprint with 9 stream crossings	172.6 ha (426.6 ac) footprint with 8 stream crossings
Cultural Resources	Requires small amount of right-of-way from property eligible for National Register.	Requires small amount of right-of-way from property eligible for National Register.	Requires small amount of right-of-way from property eligible for National Register.
Agricultural Land	102.5 ha 253.2 ac	95.5 ha 235.7 ac	96.7 ha 238.8 ac
Hazardous Waste	Potential	Potential	Potential
Land Use/ Socio- economics	Residences: 10 Businesses: 2	Residences: 14 Businesses: 2	Residences: 10 Businesses: 1
Cost	\$157 million (min) \$185 million (max)	\$186 million	\$186 million

S.5 Issues and Areas Of Controversy

S.5.1 Farmland Loss

The proposed project would require approximately 21 to 22 ha (52-55 ac) of prime farmland. There are approximately 5961 ha (14,903 ac) of prime farmland in Placer County. Thus, the maximum amount potentially removed from production represents approximately 0.004 percent of the total.

S.5.2 Wetland Conservation Easement

One property within the proposed right of way for the Lincoln Bypass is, or will be, in a conservation easement called the Wetlands Reserve Program administered by the U.S. Dept. of Agriculture. The Wetlands Reserve Program is a voluntary program offering landowners the opportunity to protect, preserve and enhance wetlands on their property. The program is targeted at marginal farmland that was previously wetlands. The D13 North Modification and D13 Dowd Alternatives were developed to avoid this property and are presented in more detail in Chapter 2.

S.5.3 Growth Inducement

Decision makers in Placer County and the City of Lincoln believe that growth is inevitable, and have developed strategies to manage it so this area retains the qualities of life the citizens' desire. Lincoln is laying the groundwork to become the next large growth area in western Placer County.

In 1988, the City of Lincoln updated its General Plan to designate areas where development should occur. The City determined that the adoption of the proposed Land Use Element would cause significant growth inducing impacts, resulting in levels of population and urban development in excess of that which would otherwise occur within the existing city limits under the former General Plan. According to the City of Lincoln's General Plan Environmental Impact Report, Lincoln's adoption of the land use policies specified in the General Plan would commit lands for mixed urban uses that are currently used for agriculture and livestock grazing. The distribution and concentration of population would also be increased by adoption of the Land Use Element. These impacts were found to be both significant and un-mitigatible. The Bypass would be an eventual component of the circulation plan.

S.5.4 Sensitive Habitat Impacts

Wetlands are distributed throughout the project area; thus any project alternative involving new construction would impact wetlands. Vernal pools are considered among the more biologically sensitive wetland types due to their relative scarcity and the difficulty in mitigating impacts to this type of wetlands. Vernal pools also provide habitat for several sensitive plant and animal species found in the area. Table iv and Table v compare the total wetland loss and oak habitat loss for all the alignments.

Table iv Wetland Habitat Loss

	AAC2	A5C1	D1	D13	D13 South Modified	D13 North Modified
ACOE Jurisdictional	6.3 ha	9.4 ha	5.7 ha	5.3 ha	6.8 ha	5.1 ha
Waters in hectares (ac)	(15.5 ac)	(23.1 ac)	(14.1 ac)	(13.1 ac)	(16.8 ac)	(13.8 ac)
Vernal Pools and swales	3.3 ha	6.5 ha	2.8 ha	2.2 ha	3.5 ha	2.1 ha
in hectares (ac)	(8.0 ac)	(16.1 ac)	(6.8 ac)	(5.4 ac)	(8.8ac)	(5.2 ac)

Table vi Oak Habitat Loss

	AAC2	A5C1	D1	D13	D13 South Modified	D13 North Modified
Oak habitat in	10.2 ha	5.8 ha	0.4 ha	3.5 ha	0.2 ha	3.4 ha
hectares (acres)	(25.2 ac)	(14.3 ac)	(0.9 ac)	(8.6 ac)	(0.4 ac)	(8.4 ac)

S.5.5 Endangered Species Habitat

The project would result in the removal of a substantial amount of wildlife habitat by converting open space to paved highway. Chapters 3 and 4 describe all the special status species that could be affected by the project. The plants and animals listed in Table vi are protected by either the Federal Endangered Species Act, or the California Endangered Species Act.

Table vi Federal and State Threatened and Endangered Species Potentially Occurring in the Project Area

Common Name	Latin Name	Status
Swainson's hawk	Buteo swainsoni	State Threatened
American peregrine falcon	Falco peregrinus anatum	State Endangered
Aleutian Canada goose	Branta canadensis leucopareia	Federally Threatened
California red-legged frog	Rana aurora draytonii	Federally Threatened
Vernal pool fairy shrimp	Branchinecta lynchi	Federally Threatened
Vernal pool tadpole shrimp	Lepidurus packardi	Federally Endangered
Valley elderberry longhorn beetle	Desmocerus californicus dimorphus	Federally Threatened
Slender Orcutt grass	Orcuttia tenuis	Federally Threatened, State Endangered
Sacramento Orcutt grass	Orcuttia viscida	Federally Endangered State Endangered
Bogg's Lake hedge-hyssop	Gratiola heterosepala	State Endangered

S.6 Other Federal Actions Required For This Project

S.6.1 NEPA/404 MOU / Concurrence process

A Section 404 Individual Permit would be required from the U.S. Army Corps of Engineers (ACOE) for impacts on wetlands and waters of the U.S. The ACOE issues the permit; however, the U.S. Environmental Protection Agency has oversight and override authority of this permit.

Concurrence has been obtained on the projects purpose and need, range of alternatives and criteria for choosing an alternative by the signatories of the NEPA/404 MOU: the U.S. Army Corps of Engineers (ACOE), U.S. Environmental Protection Agency (EPA), National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (FWS), Federal Highway Administration (FHWA) and the Department of Transportation (Department).

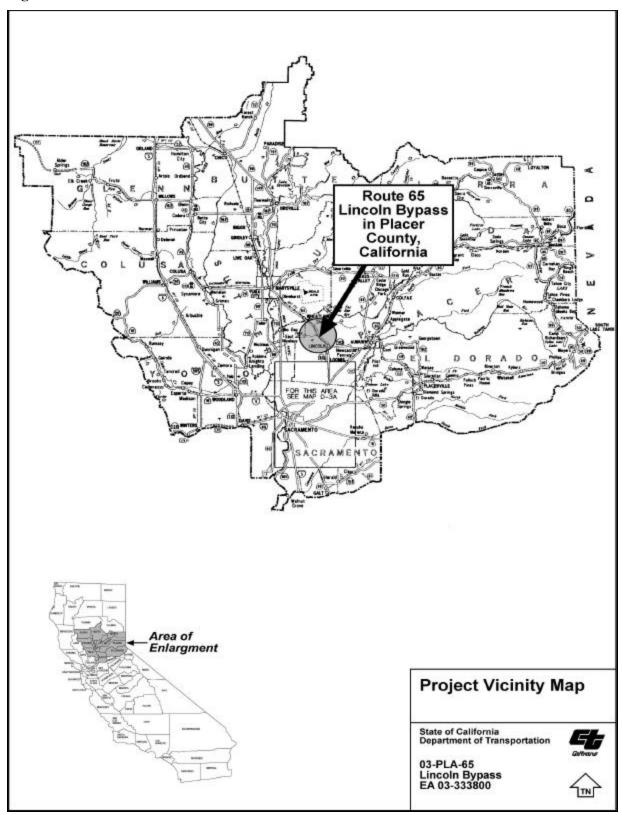
A wetland verification was completed for the project impacts, however, that verification expired in 1991. The Department met with the ACOE and requested that the expired verification be adequate for use in comparing impacts until a preferred alternative is chosen. At that time, a new wetland delineation and verification would be performed. The ACOE agreed to this approach. (Meeting with ACOE on March 11, 1999)

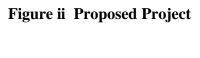
An Alternatives Analysis prepared in accordance with the Section 404(b)(1) Guidelines and following the NEPA/404 Integration Process would be completed. The Alternatives Analysis identifies the "Least Environmentally Damaging Practicable Alternative" (LEDPA). This information would be used in obtaining the Individual Permit from the ACOE.

After circulation of the Draft Environmental Impact Statement / Report (EIS/R) and identification of the LEDPA, a preliminary agreement with FWS on the project mitigation is required. A "Non-Jeopardy" Biological Opinion pursuant to the Federal Endangered Species Act is also required from the FWS after circulation of the Draft EIS/R.

Written agreement that the preferred alternative is, indeed, the "Least Environmentally Damaging Practicable Alternative" is required from ACOE and EPA. Agreement that the preferred alternative would not seriously degrade the aquatic environment and that the project mitigation plan and implementation schedule is adequate is also required after circulation of the Draft EIS/R.

Figure i Location





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1 Purpose & Need

1.1 INTRODUCTION

The California Department of Transportation (Department) and the Federal Highway Administration (FHWA) propose to modify the adopted route for State Route 65 (SR 65) in Placer County in the vicinity of the City of Lincoln from Kilometer Post (KP) 20 to 38 (Postmile [PM] 12.41/R23.66). This will allow for the identification and preservation of a new corridor for the eventual staged construction of a four-lane freeway with interchanges at selected locations, and the ultimate relinquishment of a portion of the existing SR 65 to the City of Lincoln and Placer County. The project begins near the junction of Industrial Blvd. and SR 65 just south of the City of Lincoln and extends to the Bear River, just north of the town of Sheridan. (Please see Figure i and ii following the Executive Summary.) For a complete description of this project, please see Chapter 2, Proposed Alternatives.

This document has been prepared in conformance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) requirements to address potential environmental effects of the proposed adoption of a corridor and construction of a highway. Its purpose is to help decision makers and citizens make an informed evaluation of this project based on an understanding of its environmental consequences, and to recommend actions to protect, restore and enhance the affected environment by avoiding sensitive areas, minimizing impacts and mitigating for unavoidable impacts.

The following subject matter have been evaluated for potential effects on the proposed project: visual resources, cultural resources, community impacts, land use and economics, hydrology, noise, air and water quality, geology, natural resources, wetlands and hazardous waste. Chapters 1 and 2 cover the purpose of and need for the proposed action and alternatives. The affected environment is described in Chapter 3, and environmental effects and cumulative impacts are discussed in Chapter 4. Chapter 5 discusses irreversible commitments of resources and Chapter 6 discusses unavoidable adverse effects. In Chapter 7 you'll find comments and correspondence related to this project.

This Draft EIS/EIR will be circulated for a period of 45 days. During the draft EIS/EIR circulation period, at least one public hearing will be held to provide an opportunity for public comments and concerns. Comments can also be submitted in writing to the address indicated on the draft EIS/EIR title page.

CEQA requires that there be a balance between the benefits of the proposed project and the unavoidable environmental risks and impacts. If the benefits outweigh the unavoidable adverse environmental impacts, then these impacts may be considered acceptable. Whenever the decision of a public agency allows these impacts to occur, that agency must prepare a "Finding of Overriding Considerations" that states the specific reasons to support the project. This "Finding of Overriding Considerations" will be included in the record of project approval and mentioned in the Notice of Determination (NOD) which will be filed with the State Office of Planning and Research.

The Final EIS/EIR will respond to the comments received in writing and at the public hearing and identify the preferred alternative. No sooner than thirty days after the final EIS/EIR has been made available to the public and those who commented on the draft EIS/EIR, a Record of Decision (NEPA) and a Notice of Determination (CEQA) will be approved documenting the decision made about the project. The Record of Decision explains why an alternative has been selected, summarizes mitigation and monitoring and summarizes efforts made to minimize the environmental impacts.

This project has been included in the 2000/01 Metropolitan Transportation Improvement Program (MTIP) and the 1999 Metropolitan Transportation Plan (MTP). On July 20, 2000, the SACOG signed Resolution 29-2000 finding that the 2000/01 Metropolitan Transportation Improvement Program (MTIP) conforms to the 1994 State Implementation Plan (SIP) under the EPA conformity rule for the Sacramento ozone non-attainment area, carbon monoxide attainment area and particulate matter unclassified area. The conformity determination was signed by the Federal Highway and Federal Transit Administrations on October 5, 2000. At this time, only the purchase of right-of-way is programmed.

1.1.1 Project History

SR 65 between the Placer County line and to just north of Wise Power House Road was adopted as a freeway by the California Highway Commission, (now known as the California Transportation Commission) on May 20, 1964. Since that time there have been considerable changes in land uses along the existing alignment from Roseville through Lincoln. Once primarily agricultural in nature, the past thirty years has seen a shift to industrial, residential and commercial land uses within the routes corridor. In the 1980's, the city of Lincoln, recognizing the need to preserve a corridor for another route due to growth in the area, requested the California Transportation Commission (CTC) to consider a modification to the Route for the portion between Industrial Blvd. to just north of the city of Lincoln (Resolution No. 87-23).

A Project Study Report for a new Route Adoption was prepared by the Department for the Lincoln Bypass in July 1987. In November of that same year, a public

informational meeting was held. (A summary of public involvement can be found in Chapter 7, Comments and Coordination.)

The CTC included the proposed route adoption in its 1988 State Transportation Improvement Program (STIP) Special Studies list of projects.

A Notice of Initiation of Studies was circulated to State, Federal and local agencies and organizations in July of 1989 and the Stage II Work Program, which discussed most of the alternatives now being evaluated, was prepared by the Department in March, 1990.

A Notice of Preparation was sent to the State Clearinghouse on June 18, 1990 and a Notice of Intent was published in the Federal Register on June 28, 1990. These Notices described the project that is now being proposed. Copies of these documents can be found in the Appendix C.

Two more public informational meetings were held; on May 1, 1990 and April 18, 1991 and three newsletters were sent out between April 1990 and March 1993. The information obtained from these workshops and responses to the notices were used to refine the projects alternatives, and studies evaluating the environmental impacts were initiated.

A Major Investment Study (MIS) was completed in October 1995 which evaluated different transportation solutions to the increasing congestion along this corridor. The MIS concluded that a highway facility is the most efficient and cost effective solution to the congestion along this route. The MIS is summarized in Section 1.3.9.

An additional informational meeting was held on September 22, 1999. At that meeting, it was suggested by a number of attendees to combine alternative D1 and D13, thereby moving the alignment further from homes in the Brookview subdivision. This alternative was considered and is described in Chapter 2.

At that meeting, it also came to light that some property on the northern end of the project was slated for a Wetland Conservation Easement. Due to these impacts, two more alternatives, D13 North Modified and D13 Dowd, were proposed that avoided that property. The D13 Dowd alternative was withdrawn from consideration due to operational conflicts. Both are discussed in Chapter 2.

This project is one of several transportation projects responding to the growth in the area. These are listed in Section 1.3.12 later in this chapter.

1.2 PURPOSE OF PROJECT

The purpose for this project was developed with the cooperation and concurrence of the U.S. Fish and Wildlife Service, the U.S. National Marine Fisheries Service, the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers under the terms of the NEPA/404 Memorandum of Understanding (MOU). The project purpose is

to relieve congestion and improve safety on existing SR 65 through the City of Lincoln and provide for a regional traffic solution to accommodate projected traffic volumes through the year 2025.

1.3 NEED FOR PROJECT

Continuing growth in South Placer County and the Sacramento Valley has resulted in the need for a new and improved SR 65 corridor, which would alleviate congestion in the City of Lincoln while providing for improved inter-regional traffic flow. The existing facility through Lincoln is a "Main Street" highway, which will not serve the ultimate transportation needs of the region. Due primarily to congestion, the accident rate in downtown Lincoln is higher than the average rate for this type of facility. As traffic volumes continue to increase, SR 65 within downtown and south of Lincoln is expected to exceed available capacity by the year 2005.

1.3.1 Existing Roadway

SR 65 serves as a major north-south highway along the east side of the Sacramento Valley. It was included as part of the State Highway System under authorization of the State Highway Act of 1909, and was made part of the California Freeway and Expressway system in 1959. The original construction from Roseville to Lincoln, designated as SR 3, took place between 1912 and 1914 and was adopted as a freeway by the California Highway Commission (now known as the California Transportation Commission [CTC]) on May 20, 1964. SR 65 connects the urbanized areas of Sacramento and Roseville with the cities of Lincoln, Wheatland, Marysville and Yuba City. SR 65 begins in Roseville at I-80, extending to the junction of SR 70 in Yuba County. Legislation was passed in 1985 extending the legislative description of the route to SR 99 in Yuba City.

The Roseville Bypass was completed from I-80 to Pleasant Grove Creek Bridge (KP 7.7 to 14.2 [PM R4.8 to R8.8]). The Harding Boulevard interchange, a locally funded project at KP 9.5 (PM R5.9), began construction in the summer of 1989 and was completed in 1992. Between Pleasant Grove Bridge and Industrial Boulevard, SR 65 is a four-lane expressway with an intersection at Sunset Blvd.

The downtown business section begins just north of Auburn Ravine at KP 21.4 (PM 13.3) and continues to Gladding Road. Beginning at First Street, one through-lane in each direction is provided with a continuous two-way left turn lane. On-street parking and sidewalks are also provided. Traffic signals are located at Westwood Boulevard, First Street, Third Street, SR 193 (also known as Fourth St.), and Fifth and Seventh Street. The left turn lane ends near Gladding Road, at the edge of town.

The existing road between Lincoln and Sheridan is a two-lane conventional highway. It is parallel to and east of the railroad tracks. Right of way in this vicinity is typically 30.5 to 33.5 m (100-110 ft) wide. Between Lincoln and Sheridan, there are two passing locations; each approximately 2.4 km (1.5 mi) long. Curves and left-turn channelization along this section of highway limit passing opportunities.

From Sheridan north, the route continues as a two-lane conventional highway, passing through the town of Wheatland, slowing down traffic to 35 mph. Three miles north of Wheatland, the highway becomes a four lane freeway and terminates at the SR 99 in Yuba City.

1.3.2 Traffic Summary

The Lincoln Bypass will provide a substantial benefit in accommodating regional traffic and helping to reduce congestion in and south of Lincoln. Without the Bypass future traffic congestion will create gridlock conditions surrounding Lincoln.

As a result of the gridlock in Lincoln, traffic will divert to local streets which will then become congested, emergency vehicles may be unable to respond in a timely manner, commute, local, recreation and regional trip travel times will increase dramatically and overall quality of life will suffer.

The Lincoln Bypass will reduce overall delay within the Study Area by over 300% and will increase overall speeds in the Study Area by over 250% in 2025 compared to the "No Build" Alternative. See Table 1-4 and Table 1-5 for more detailed information. The ultimate project, which will not be built until additional funding becomes available, will provide speeds of 105 kph (65 mph) compared to speeds of less than 40 kph (25 mph) on the existing route between Industrial Avenue and the Bear River, which, coincidentally, also marks the Placer/Yuba county line.

Traffic Study Methodology

Two types of traffic models were used to complete the traffic study for the Lincoln Bypass: a regional demand model and micro-simulation model. A regional demand model is comprised of many zones, which include land use elements such as the number of houses, amount of employment and future housing and employment changes in and around the City of Lincoln. This demand model provides the future traffic volumes and determines the amount of traffic that will use the Bypass, interchanges and local roads.

The Regional Demand Model used for this project consists of two traffic models, the Yuba/Sutter Travel Demand Model (YSTDM) and the Butte County Transportation Model. The Sacramento Area Council of Government (SACOG) is responsible for the YSTDM and the Butte County Association of Government (BCAG) is responsible for the Butte County Model. The two transportation models were combined into one model in order to analyze traffic demand using roadway corridors throughout the various counties.

Included in the combined model are Butte, Sutter and Yuba Counties, and parts of Placer, Sacramento and Yolo Counties.

Land-use for years 1998, 2015 and 2025 and the model files were obtained from SACOG and BCAG covering their respective areas. Recent count data and future road network information were obtained from all local agencies and used where needed. The Statewide Travel Survey (Department) and the Household Travel Survey Report #1 (SACOG) were used for the number of trips, average trip length and other pertinent information.

The CORSIM Model

If a traffic system is simulated on a computer, it is possible to predict the effects of a proposed project on the traffic system's operational performance. Outputs from a simulation model also provide the basis for optimizing this performance.

Starting in the mid 1970's, the FHWA recognized this need and ultimately TRAF was developed. TRAF, abbreviated from TRAFFIC, consists of an integrated set of simulation models, which includes CORSIM. CORSIM stands for <u>corridor simulation</u> and consists of a <u>fre</u>eway network named FRESIM and a surface street <u>net</u>work named NETSIM.

CORSIM is a micro-simulation model, which means each vehicle using a specified car-following logic is a distinct object that is moved every second and its behavior interacts with the surrounding environment. This may include other vehicles, control devices (such as traffic signals) and roadway characteristics. In addition, vehicle types can be specified with different operating performance characteristics and driver behavior characteristics (passive or aggressive) can be assigned to each vehicle. Many other model elements can be modified or customized. CORSIM is a stochastic model, which allows vehicles to be simulated in a more realistic manner by using randomness in the analysis.

A micro-simulation model has the ability to evaluate the proposed improvements in detail and provide a myriad of outputs. CORSIM also has the ability to show vehicle animation, which is useful to show the traffic study results to the project development team, to the public and to project management or elected officials.

The CORSIM micro-simulation traffic model used for this project compares different alternatives over different time periods. These include the 1998 Base Year, 2015 and 2025 No Build, and the D13-D1, A5C1-AAC2 alternatives for years 2015 and 2025. The model outputs include such items as the amount of traffic diverted from the existing SR 65 to the new Bypass and average speeds on the Bypass and on the old SR 65 for each of the alternatives. It is important to note the traffic model is more accurate in comparing the relative difference between alternatives than in predicting the future results as absolute values.

1.3.3 Level of Service

Segments of highway or roadway are evaluated for present and/or future traffic handling capacity through use of standardized Level of Service (LOS) grading systems. LOS is a qualitative measure describing operational conditions within a traffic stream or at an intersection, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience and safety. LOS are designated A through F, from best to worst, and they cover the entire range of traffic operations that may occur. Figure 1-1 illustrates what is meant by LOS with regard to a freeway segment with a free flow speed of 105 kph (65 mph). Different criteria are used to determine the Levels of Service at intersections, illustrated in

Table 1-1. The Lincoln Bypass will be designed for a Level of Service C to E.

Figure 1-1 Level of Service for Freeways

Α	A B		С	D	F	
	100					
A	_	quality of service. Fron on maneuverability				
В		raffic flow, speed become (65 mph). No delay.	oming slightly restrict	ed. Low restriction or	n maneuverability.	
C		raffic flow, but less from (64.5 mph). Minima		, change lanes or pass.	Density increasing.	
D	Speeds tolerable but subject to sudden and considerable variation. 100 kph (62 mph). Minimal delay.					
E	Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headway's, low maneuverability and low driver comfort 84 kph (52 mph). Considerable delay.					
F	Stop and	d go traffic. Speed an	d flow vary. Consider	rable delay.		

LOS at intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption and lost travel time. LOS A represents no delay and LOS F represents very heavy traffic congestion and considerable delay. Longer delays may result from some combination of unfavorable traffic lights progression, long cycle lengths or a high volume to capacity ratio. LOS D is considered by many agencies to be the limit of acceptable delay. LOS F results in delays over one minute long, considered by many drivers to be unacceptable. This level often occurs with oversaturation, i.e. when arrival flow rates exceed the capacity of the intersection.

Table 1-1 LOS at Intersections

LOS at intersections	LOS A	LOSB	LOS C	LOS D	LOS E	LOS F
Delay (in seconds)	<5-10	10-20	15-25	35-55	55-80	> 60-80

1.3.4 Traffic Volumes and Level of Service

Predicted traffic volumes for the bypass were determined by using a combination of the the Department' 1998 Tri-County Travel Demand Model (CTCTDM), various consultant prepared traffic studies for local development, a 1998 travel survey and the City of Lincoln General Plan. Traffic volumes on the Bypass can be broken into two components; local traffic and through traffic (regional and interregional). An estimated 40% of the 2025 northbound traffic on the Bypass will access local developments and the existing industrial complex near the airport. The remaining 60% will be "through" traffic continuing north towards Marysville.

Table 1-2 shows the existing 1998 traffic volumes as well as future traffic projections for the "No Build" and "Build" scenario for the year 2015 and 2025. The worst case was used to illustrate congestion. Thus, the northbound evening peak hour volumes are used to illustrate the general congestion of the roadway since northbound is more congested than southbound in the evening and evening peak hours are generally worse than morning peak hours due to the combination of commuter trips and other trips (shopping, errands, school, etc).

The LOS for each segment is based on additional factors than just the volumes shown in the table below. The additional factors include the percentage of truck traffic, the type of driver (commuter or recreational) and roadway characteristics such as shoulder width, lane width and number of driveways.

Table 1-2 NB/PM Peak Hour Traffic Volumes, Existing and Predicted

Existing	Existing Route								
	Industria	l to First ¹	First to S	Seventh 1	Seventh to Wise ¹		Wise to Co. Line ¹		
Year	VOL	LOS ¹	VOL	LOS	VOL	LOS	VOL	LOS	
1998	1230	Е	1050	D	620	D	700	D	
2015	2000	Ŀ	1200	F	1100	Ш	1000	E	
2025	2300	F	1200	F^2	1100	F	1000	E	
Existing	g Route V	Vith Byp	ass						
2015	1400	Ш	1000	D	750	D	500	D	
2025	1400	Е	1100	F^3	850	D	600	D	
On Byp	ass Alter	native D	1			Foot	notos	_	
	Industrial (Four	to Nelson ¹ lanes)	Nelson to SR		Footnotes 1 Traffic volumes for each segment are at select locations.				
2015 ⁴	2200	С	1350	Е		four hours			
2025 ⁵	2300	С	1500	С	³ LOS for one hour.				
On Bypass Alternative AC					⁴ Minimum project (4 lanes up to Nelson			o Nelson	
2015 ⁴	2300	С	1350	Е	or Nicolaus then to 2 lanes) 5 Ultimate project (4 lanes throughout)			ighout)	
2025 ⁵	2300	С	1500	С				ignout)	

Traffic demand is 600 vehicles greater than capacity on SR 65 south of Industrial Boulevard for 2015 and 2025 "no build" and 2025 "build" which creates a bottleneck

preventing the traffic from getting to the bypass. This moderates the traffic congestion on the bypass in future years.

The LOS at intersections is illustrated in Table 1-3.

Table 1-3 Intersection	1 Level of Service	on Existing SR 65

Intersections with SR 65	1999 LOS	2015 LOS NO BUILD	2015 LOS BUILD	2025 LOS NO BUILD	2025 LOS BUILD
Sterling	Not Applicable	F	D	F	D
Westwood	С	F	D	F	Е
Wise	С	Е	D	Е	D
Riosa	D	F	D	F	D

Continuing growth in residential, commercial and industrial development in and around the City of Lincoln has resulted in congestion on existing SR 65 through the Study Area. In 1998, SR 65 operated at an LOS D through the project area and was projected to decline to LOS E/F by 2005. Approved proposed development in and around the City of Lincoln will significantly add to the congestion. Northbound traffic demand south of Industrial Avenue is expected to increase approximately 300% over the next 25 years. Cross traffic resulting from numerous driveways, signalized intersections and proposed future connections will further contribute to the deterioration of the level of service in the downtown area.

Regional trips originating and terminating in Lincoln are expected to increase as the City's economy grows. As of 1998, there were 19,000 vehicles per day on SR 65 in the City of Lincoln. Traffic north of Lincoln is projected to increase from 11,000 per day to approximately 32,000 vehicles per day by the year 2025. South of Lincoln, traffic volumes on SR 65 are expected to increase from 20,000 vehicles per day to approximately 70,000 vehicles per day by the year 2025.

Table 1-4 illustrates the congestion that is currently experienced on SR 65 by comparing the overall speed and total delay for the existing road, "no build" and "build" scenarios. The Study Area includes the greater City of Lincoln area and north past Sheridan to approximately the Placer/Yuba county line.

The project was broken up into minimum project and ultimate project due to funding constraints. A more detailed explanation of project phasing is available in Chapter 2. Briefly, the **minimum** project is to construct a four lane expressway to Nelson Lane (D alternatives) or Nicolaus Road (AC alternatives) with an interchange at Industrial Boulevard. The Lincoln Crossing development will construct an interchange at Westwood Boulevard independently from this project. A two lane facility will be constructed for the remainder of the project, with at-grade intersections at Nelson, Nicolaus, Wise and Riosa Roads. **Ultimately**, the project will be a four lane freeway with interchanges the entire length of the project.

	ar speeds rand 2	0100	zword z i o yorum spoous izmu z orujs yyrum zmo zmoro study izrou					
Alternative		ll Speed peak hour (mph)	Overall total delay (vehicle hours)					
1998 Base	70 kph	(44 mph)		70				
2015 No Build	24 kph	(15 mph)	1	850				
2025 No Build	21 kph	(13 mph)	2	850				
2015 Minimum P	roject							
D Alternatives	56 kph	(35 mph)	500					
AC Alternatives	56 kph	(35 mph)	500					
2025 Ultimate (4 lane freeway)								
	Local roads	Freeway	Local roads	Freeway				
D Alternatives	35 kph (22 mph)	89 kph (55 mph)	750	80				
AC Alternatives	35 kph (22 mph)	1 1 1 1 1 1		95				

Table 1-4 Overall Speeds And Delays Within The Entire Study Area

Overall speeds represent the average speed of all roads in the Study Area including SR 65, SR 193 and most local roads. Overall speeds include the impacts of traffic signals, stops signs, traffic volumes and the railroad crossing on SR 65 at Sheridan. Overall delays represent the difference between free flow speed and the predicted speed.

The results show that if the Bypass is not constructed, overall speed will decrease and overall delay will increase. Speeds increase and delays decrease between the scenarios as traffic signals on the Bypass (with the minimum and Phase 1 projects) are replaced with interchanges and overcrossings for the ultimate freeway project.

Table 1-5 shows the average speeds on SR 65 without the project, with the new SR 65 bypass and on the "old" SR 65 from Industrial Ave to the Placer/Yuba county line. The results of the table below show an increase in speed with the Bypass. Average speed will also increase on "old" SR 65 compared to the "no build" because traffic will be diverted to the Bypass.

Table 1-5 Average Speeds- Industrial Ave. to Yuba County Line (PM peak hour)

Alternative Northbound		Southbound					
Existing SR 65							
1998 Base	82 kph (51 mph)	84 kph (52 mph)					
2015 No Build	26 kph (16 mph)	55 kph (34 mph)					
2025 No Build	23 kph (14 mph)	34 kph (21 mph)					
Exi	Existing Route with 2015 Minimum Project						
D Alternatives	56 kph (35 mph)	56 kph (35 mph)					
AC Alternatives	56 kph (35 mph)	56 kph (35 mph)					
O	n Bypass with 2015 Minin	num Project					
D Alternatives	72 kph (45 mph)	80 kph (50 mph)					
AC Alternatives	72 kph (45 mph)	80 kph (50 mph)					
Ex	isting Route with 2025 Ult	imate Project					
D Alternatives	56 kph (35 mph)	40 kph (25 mph)					
AC Alternatives	56 kph (35 mph)	40 kph (25 mph)					
On Bypass with 2025 Ultimate Project							
D Alternatives	105 kph (65 mph)	105 kph (65 mph)					
AC Alternatives	105 kph (65 mph)	105 kph (65 mph)					

1.3.5 Safety

Accident rates on existing SR 65 within the city of Lincoln are consistently higher than the average rate for this type of highway. The proposed project will relieve congestion and thus reduce accident potential in downtown Lincoln by providing a four-lane freeway to carry regional "through" traffic around the city to the west. The average accident rate on a conventional highway such as this is 1.8 accidents per million vehicle miles. A four-lane controlled access freeway would have an average total accident rate of 1.07 accidents per million vehicle miles. The table below shows average accident rates for highways similar to this one, compared to the actual accident rates at different sections along SR 65 from the beginning of the year 1995 to the end of the year 1998.

Table 1-6 Accident Rates (per million vehicle miles)

	Average			Actual		
	Fatal	Fatal + injury	Accident Rate	Fatal	Fatal + injury	Accident Rate
Moore Rd	0.005	0.12	0.26	0.00	0.14	0.14
First St.	0.003	0.30	0.77	0.00	0.26	1.10
Second St.	0.003	0.11	0.26	0.00	0.07	0.78
Third St.	0.005	0.16	0.42	0.00	0.35	1.21
Fourth/Rt. 193	0.004	0.19	0.47	0.00	0.44	1.39
Fifth St.	0.003	0.39	0.77	0.00	0.18	0.94
Sixth St.	0.005	0.16	0.42	0.00	0.19	0.78
Seventh St.	0.005	0.16	0.42	0.00	0.36	1.21
Gladding Road	0.003	0.11	0.26	0.00	0.00	0.08
Mill Road	0.05	0.12	0.26	0.00	0.00	0.11
Sheridan at RR x'ing	0.065	0.81	1.61	0.41	1.64	4.11

The longer alternatives would continue the bypass to the north of Sheridan superseding the existing at-grade railroad crossing which would also reduce the accident potential in Sheridan at the railroad crossing.

1.3.6 Bicycle Facilities

At this time, bicycle use in Lincoln is limited to existing streets without bike lane demarcation. Lincoln's bike plan is shown in Figure 1-2. The city has adopted a bike route plan, which is incorporated into the Placer County Bikeway Master Plan (see Figure 1-3). The proposed project does not accommodate bicycles, however the existing SR 65 will be available for bicycle use, with reduced auto traffic, providing for a safer and more enjoyable bike ride.

Figure 1-2 Lincoln Bike Route Plan

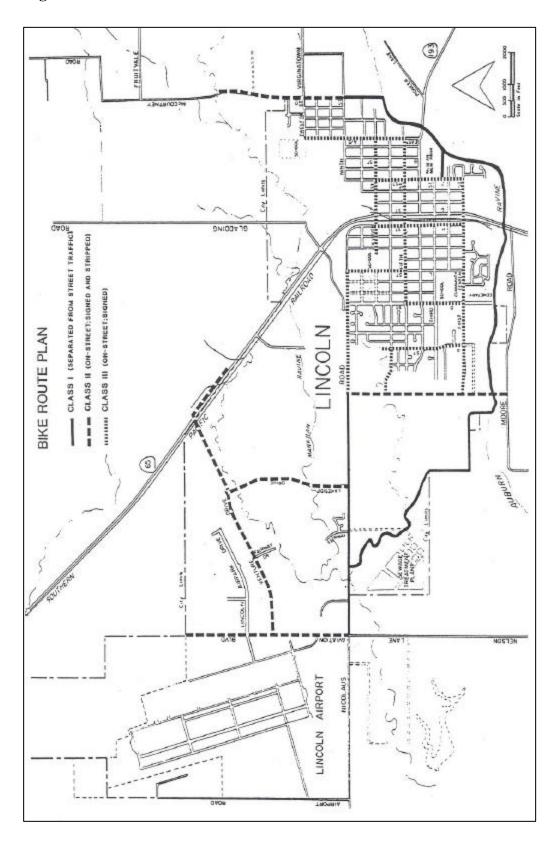
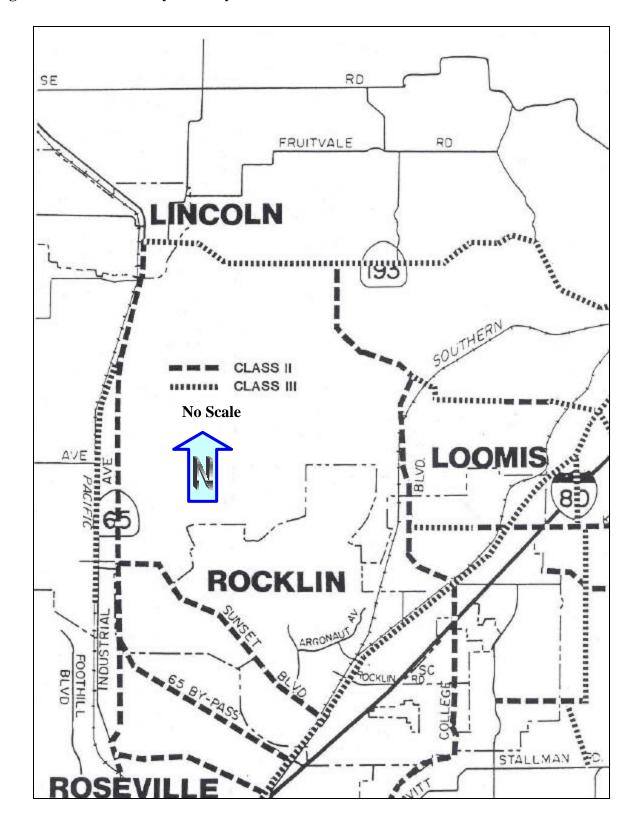


Figure 1-3 Placer County Bikeways



1.3.7 Airports

The Lincoln Municipal Airport is an important transportation link, serving recreational and corporate needs. The airport is operated by the Lincoln Airport Authority, a public entity of both the City of Lincoln and Placer County. Due to its proximity to major industrial and population centers in the South Placer region, the Lincoln Airport has become an attractive alternative to the Sacramento International Airport, especially for executives of major industries in Rocklin and Roseville. In the year 2000 there were 210 aircraft based at this airport, with a total of 72,000 flights in and out that year. The airport is designed to accommodate an additional runway, which would double its capacity, however expansion is not scheduled in the near future. Alternatives D1 and D13 include improvements to Nelson Lane, which will provide for convenient access to the airport from the proposed highway.

1.3.8 Existing Transit Services

Buses

Greyhound operates an express bus route between Roseville and Marysville. In addition, intercity bus transit service is being provided between the city of Roseville and SR 193, just outside of the City of Lincoln. Expansion of this service to Lincoln is currently identified in the Placer County Short-Range Transit Plan.

The City of Lincoln is currently served by the Lincoln Transit Service, consisting of weekday fixed routes within the city limits.

Park and Rides

There is one Park and Ride lot within the Roseville/Lincoln/Marysville corridor. It is located on Sierra College Boulevard and SR 193 east of Lincoln. It has 14 parking spaces and no bike lockers and is approximately 21 percent occupied. In addition, a Park and Ride potentially serving SR 65 is located off of Interstate 80 at the junction of SR 193. That Park and Ride has 37 spaces and is generally 33 percent occupied.

An informal Park and Ride is located in McBean Park, next to the Pavilions. This is not a Department facility, and no statistics are available on its use.

The cities of Roseville, Rocklin, Lincoln and Placer County have jointly set up ride sharing ordinances for South Placer County. The ordinances are designed to ensure that employers will share in the responsibility of mitigating some of the traffic and air quality impacts resulting from the increase in employment and auto traffic along this corridor. Larger employers are required to take certain actions to promote ride sharing among their employees; including designating a transportation coordinator to provide employees ride share and commute options information, establishing preferential parking for car/van

pools and preparing a transportation plan which would achieve a 30% reduction in vehicle trips. The proposed project includes a Park and Ride lot at Industrial Boulevard.

Rail

Roseville-Lincoln-Marysville Passenger rail is being examined by the Placer County Transportation Planning Association (PCTPA) as a modal option for longer commutes. Amtrak terminals are located in Sacramento and Marysville and the line goes through the City of Lincoln, however, the Amtrak Starlight is not anticipated to stop in Lincoln within the next 20 years. Currently, the Capital Corridor Intercity rail runs between Sacramento and San Jose, with two trips per day to Colfax, stopping in Roseville. This service is expected to generate a ridership of 8,700 passengers a day by the year 2010.

Southern Pacific Railroad operates a mainline through the center of Lincoln along the west side of SR 65. This line is used only for freight service. The railroad tracks cross seven streets at-grade in the downtown area, and the gate controlled track crossings can cause delays to side street traffic.

1.3.9 Major Investment Study (MIS)

An MIS was completed October 25, 1995, focusing on SR 65 from Industrial Blvd. to the Bear River. This study was written to meet metropolitan planning regulations set forth by the Inter-modal Surface Transportation Efficiency Act (ISTEA) of 1991. The MIS evaluated the efficiency and cost effectiveness of a full range of modes of transportation to be considered as solutions to transportation problems on SR 65.

Although written by the Department, the MIS was developed with the cooperation of the Sacramento Area Council of Governments (SACOG), the Placer County Transportation Planning Agency (PCTPA), the City of Lincoln, Placer County Department of Public Works, local and regional transit operators, the Federal Highway Administration (FHWA) and the Federal Transit Authority (FTA). Through a collaborative process with these agencies, the MIS evaluated a full range of alternatives including:

Four-lane freeway bypass of Lincoln on new alignment

The four-lane freeway bypass consists of an access controlled freeway from Industrial Blvd. to the Bear River, including a partial interchange at Industrial Blvd. and full interchanges at Nelson Lane, Wise Road and Riosa Road with an overcrossing at Nicolaus Road. Total cost was estimated in 1994 at \$71 million.

Minimum Bypass alternative on a new alignment

This alternative consists of a four-lane expressway from Industrial Blvd. to Westlake (now known as Westwood) Blvd. The remainder of the project would be an access-controlled two-lane expressway ending at the Bear River. This

alternative includes a partial interchange at Industrial Blvd. and at-grade intersections at Nelson Lane, Nicolaus, Wise and Riosa Roads with an undercrossing at Dowd Road. Total cost was estimated in 1994 at \$39.8 million.

Two-lane bypass of Lincoln on new alignment

This alternative includes the construction of a two-lane bypass of Lincoln from Industrial Boulevard to just south of Nicolaus Road. This alternative includes a partial interchange at Industrial Boulevard and a full interchange at Nelson Lane, which would serve the Lincoln Airport. At-grade intersections would be provided at Nicolaus Road, Wise Road and Riosa Road. Total cost was estimated in 1994 at \$54 million.

Intercity Transit bus service

This alternative examines the possibility of expanding existing intercity bus service, a commute oriented rubber-tire transit service connecting the areas of Roseville, Rocklin, Lincoln and Marysville. The estimated cost is not available.

Transportation System Management/Travel Demand Management (TSM/TDM)

This alternative covers a range of improvements and strategies that aim to reduce the demand on and increase the efficiency of the existing transportation system, including measures such as the expansion of park and ride facilities with connections to intercity transit bus service, ride matching, car/vanpooling and teleconferencing. The estimated cost is not available.

Widening existing SR 65 to four lanes

The existing alignment would be upgraded to four lanes and from Moore Road through Gladding Road a continuous left turn lane would be constructed. The proposed upgrades through downtown Lincoln could generally be accomplished by eliminating on-street parking and narrowing the sidewalks from 3.6 m to 1.5 m (12 to 5 ft). Total cost was estimated in 1994 at \$10 million.

Commuter rail

Commuter rail connecting Roseville to Marysville is addressed in the Corridor level study being prepared by the PCTPA. A breakdown of costs associated with this alternative are \$13 million to bypass the Roseville Rail yard, \$16 million to operate and maintain a commuter rail over a 20 year period, \$15 million capital costs for rolling stock and an undetermined amount for track rights, possibly as much as \$20 million, for a total of \$64 million.

No Build - Leaving SR 65 through Lincoln as is

The no-build alternative refers to leaving the SR 65 as it is today, with no capacity increasing projects.

These alternatives were evaluated and scored, and are listed above in the order they ranked. It was determined that the four-lane freeway bypass offered the best long-term solution to the congestion problem on SR 65 by improving safety and reducing travel through the City of Lincoln. All cooperating agencies approved the recommendations and signed the final MIS.

The MIS is available for review at the Department's District 3 office at 2800 Gateway Oaks Dr., Suite 100, Sacramento, CA 95833. Qualitative and quantitative criteria were established to accurately measure each of the alternatives effectively and ensure that they meet the purpose and need of the project. These criteria are identified below. A summary table of the Alternatives Evaluation is presented in Table 1-7. The numbers in the table indicate the score each criteria was given. A score of 3 was high and a score of 0 indicated no benefit.

- Delay, based upon through trips.
- Cost effectiveness.
- Environmental impacts.
- Safety.

- Fiscal constraints.
- Effects on agricultural lands.
- Indirect costs.
- Funding priorities for the county.

Using these criteria, the alternative investment strategies: rail transportation, light rail transportation and HOV lanes, although important when considered in a corridor analysis context, were eliminated from consideration in the MIS.

Table 1-7 Summary of MIS

Criteria						Project Costs			
Alternatives	User Benefits ¹	Safety Benefits ²	Envir. ³ Benefits	Local, County, Region perspective ⁴	TotalScore	Const. RW Maintenance (\$ millions)	Capital Operating & Maintenance (\$ millions)	Total Cost (\$millions)	
No-Build	0	0	2	0	2	\$0.0/\$0.0/\$1.4	~	\$1.4	
4-Lane on existing alignment	0	1	2	1	4	\$5.8/\$4.2/\$1.9	~	\$11.9	
2 lane minimum bypass	2	2	1	3	8	\$30.2/\$9.6/\$1.5	~	\$41.3	
4-lane freeway bypass	3	3	1	2	9	\$61.0/\$9.6/\$1.3	~	\$56.1	
Commuter Rail	1	0	3	2	6	~	\$38.0 \$20 for track rights \$16.0	\$74.0	
Intercity Transit Bus Service	1	0	3	2	6	~	\$0.3 \$6.0	\$6.3	
TSM/TDM	1	0	3	1	5	~	not available	not available	

¹User Benefits: A measure of Delay savings.

²Safety Benefits: Based on amount of savings due to reduced accidents.

³Environmental Benefits: Based on the alternatives potential to impact environmental resources.

⁴Local, County and Regional Perspective: Cooperative scoring of alternatives by City of Lincoln, Placer County Public Works and Placer County Transportation Planning Agency.

1.3.10 SR 65 Transportation Concept Report

The Transportation Concept Report (TCR) is a Department's long-term planning document that evaluates the conditions of a given state transportation corridor, and establishes a twenty year planning concept. In addition to the twenty-year concept, the TCR also looks at the ultimate transportation concept that examines the corridor needs beyond the twenty-year planning period. Forecasting beyond the twenty-year period is difficult for several reasons such as changes in future land use zoning beyond the scope of the twenty-year general plan build-out and unknown funding constraints. Therefore, any concept identified for the "Ultimate" facility must be considered speculative.

As part of route concept development, the TCR documents the planning strategies of the long-range plans identified by the Regional Transportation Planning Agencies (RTPA) and Metropolitan Planning Organizations (MPO) within a given state highway route corridor. Since state highway routes often pass through several regional planning agency jurisdictions, the TCR assimilates the regional strategies and consolidates these strategies into one comprehensive corridor-specific document.

SR 65 Route Concept Rationale

SR 65 is a road of both local and regional importance serving as a connector for both automobile and truck traffic originating on the I-80 corridor (in the Roseville/Rocklin area) and the SR70/99 corridor (in the Marysville/Yuba City area).

There are three primary sections with unique characteristics along the SR 65-corridor. Different land use classifications and growth potentials govern each sections level of service (LOS) and classification. The TCR further breaks the sections into segments based on physical characteristics of the roadway such as number of lanes, whether the road is a freeway or a conventional highway, whether the road is in an urban or a rural setting, or some other tangible change in the roadway from one location to the next. Segments always break on county boundaries. These segments allow the characteristics of the route to be viewed and analyzed in manageable portions based on like characteristics. SR 65 is divided into 6 distinct segments. Table 1-8 shows the sections, segments and the current and Concept LOS for the segment. The Sections are described below and the segments are further described in Table 1-8.

The **first section** of SR 65 is located between the I-80 interchange in Roseville and the Yuba County line at the Bear River. At the present time commuter, truck and local traffic volumes are high in this section and it is characterized by a significant growth of industrial, commercial and residential development. The projects under consideration for this area, as well as the proposed land development, will have major impacts on the transportation infrastructure. Without improvements to the roadway capacity, the General Plan concept of LOS D in the coming years will be difficult to maintain between

Lincoln and Roseville. The proposed Lincoln bypass will help to alleviate a substantial amount of the present congestion through the City of Lincoln.

The **second section** is the portion between the Yuba County line and the junction of SR 70. This section is mostly rural/urban and serves as a commuter link between Yuba City/Marysville and Roseville/Rocklin areas. This segment is identified as having a more stable population growth rate than the more southerly portion of the route. The concept LOS D will not be as difficult to maintain. Significant impacts to the transportation infrastructure would occur with the construction of a major motor sports complex with a Formula One raceway along with the existing Sacramento Valley Amphitheater. These could cause peak traffic problems associated with major events.

The **third section** is the un-built portion of SR 65 between SR 70 and SR 99 known as the "Third Bridge Crossing of the Feather River" project. This segment has been identified in by SACOG as being one of the high priority improvements in the region.

Table 1-8 Transportation Concept Report Summary

Segment	County	Post KM	Post Mile	Current Facility	Current LOS	Concept Facility	Concept LOS	Ultimate Transportation Corridor
1	PLA	7.8/13.3	4.9/8.3	E/4	D	F/6	Е	F/8

Segment 1 begins at the interchange of I-80 and SR 65 and continues to the Blue Oaks Interchange. This segment is a limited-access freeway with commercial and retail development on both sides, either currently in use, or planned for the near term. This development includes a regional shopping mall that contributes a significant amount of traffic to the route. Because of the proximity to I-80 there will be increased stress on the interchange and mainline as traffic both enters and exits SR 65 at this location.

2¹ PLA 13.3/19.2 8.3/12.3 E/4 B F/4 E F/6

Segment 2 starts at the Blue Oaks interchange and continues to the intersection of SR 65 and Industrial Avenue. This segment is currently operating as a four-lane expressway with high traffic counts due to significant industrial development to the west and commercial and residential development to the east. Three major interchanges are planned for this segment to accommodate the rapid growth of traffic volume. The interchanges are all to be financed through local impact fees.

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3 ²	PLA (Lincoln Bypass)	19.2/39.0	12.3/24.3	C/2	Е	E/4	D	F/6	
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Beginning at Industrial Avenue is the proposed Lincoln Bypass. The Bypass will allow a more efficient movement of through traffic than the present route, which travels through downtown Lincoln as a "Main Street" with traffic signals and significant cross traffic. The bypass proposals under consideration will rejoin the current alignment of SR 65 at approximately the county line (PM 24.3). The segment is approximately 12 miles long, and is currently operating at a LOS E. The existing "Main Street" segment is characterized by several unique features, and can reasonably be broken down further into three subsections:

The first subsection includes the portion of the route between the Industrial Avenue intersection and the city limits (PM 13.172). This area is characterized by several large, mixed-use developments. Each of these developments will add significant traffic to the already stressed capacity of SR 65. While the proposed projects contain varying amounts of land devoted to local employment opportunities it can reasonably be assumed that there will be significant travel to and from other local and regional employment destinations.

The second subsection of this segment begins at Auburn Ravine Bridge and includes the conventional highway that runs through the City of Lincoln. There are signalized intersections and a 25-MPH speed limit through the city. In this segment there is local traffic added to the highway. Due to the turning movements of local traffic along this subsection, congestion is significant. LOS F is observed during PM peak hour within the city limits with several cycles being needed to perform some turning maneuvers. The area is characterized by on-street parking and limited roadway width. Existing sidewalks and businesses make the prospect of acquiring additional Right of Way in the area beyond Third Street prohibitively expensive. The crossing of Markham Ravine (PM 14.8) marks the end of this subsection. Further study needs to evaluate a new connection between SR 193 and SR 65 once the alignment for the Lincoln Bypass is determined.

The third subsection runs from the northern city limits of Lincoln (approximately at the Markham Ravine Bridge) to the Placer/Yuba county line located on the Bear River and delineated by the Bear River Bridge (PM 24.3). The highway in this segment runs in a northwesterly direction and is a conventional two-lane rural highway that is currently operating at a LOS D. The Bear River Bridge is non-standard in width, and widening should be considered as part of the overall route improvement and realignment plan. Depending on the final adoption of an alignment for the Lincoln Bypass, the northern end of the bypass should intersect the existing route within this subsection.

	4	YUBA	0.0/7.6	0.00/4.7	C/2	D	E/4	Е	F/4
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This segment begins at the Bear River, the County line, and continues through the City of Wheatland to the beginning of the freeway at approximately South Beale Road (PM4.7). Although the traffic counts along this segment are relatively low, congestion exists within the City of Wheatland resulting in delays and contributing to a generally poor level of service. A bypass of Wheatland will generally better facilitate the efficient movement of goods and people along this corridor.

5 YUBA 7.6/15.1 4.7/9.4 F/4 A F/4 C	F/4
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Segment 5 comprises the freeway beginning at south Beale Road (PM 4.7) to the end of the current alignment of SR 65 at the junction with SR 70 (PM 9.4). Traffic along this segment is relatively free flowing and should not need any significant modification to the facility, other than routine maintenance, during the concept period. There is a major project being developed along this segment at the intersection of Ostrom Road and Forty Mile Road with SR 65 consisting of a Formula One racecourse as well as an existing amphitheater. Local fees are providing the funding for operational improvements to the interchange at this location to help accommodate the expected traffic at peak periods before and after events at the facility.

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6 ³	YU/SUT (Bridge)	Yuba 19.6/ Sutter 2.6	12.171/1.6	Un- constructed	N/A	B/4	B/4

Segment 6 is the proposed Third Crossing of the Feather River Bridge.

^{1.} Segment includes projects under construction in analysis

^{2.} Segment includes programmed projects in analysis

^{3.} Unconstructed Bridge

Figure 1-4 City of Lincoln General Plan Circulation System

1.3.11 City, County and State Transportation Plans

City of Lincoln General Plan (1988 and 1994)

The Lincoln General Plan describes the expected long-term expansion needs of the transportation system to accommodate the growth and development of the city. The General Plan Circulation element designates a route for the SR 65 bypass. The Public Facilities Element of the General Plan, amended in 1994, serves as a guide for future development and expansion of public facilities. It is also the goal of the city to see a thirty-five percent reduction in trips generated by new employment. Policies that support that goal include Rideshare, public transit funding and improved service and encouraging new development to be pedestrian friendly.

The General Plan stresses the importance of public transit. As Lincoln grows, the routes covered by the Lincoln Transit Service will be expanded to serve newly developed areas. The City will continue to require private developers to provide for appropriate public transit amenities such as bus turnouts, bus shelters and park and ride lots. If feasible, the City will link up with the Placer County Transit System to provide inter-city transportation for Lincoln residents.

Bicycle traffic is also addressed in the General Plan. Bicycle facilities within the existing City area will be developed as part of individual projects in accordance with Lincoln's adopted bike plan. The City will work with developers to ensure that bicyclists are accommodated as new development occurs.

The Lincoln Airport continues to be an important part of the transportation system in Lincoln, especially as the municipal airports, such as the Phoenix Airport, in north Sacramento County are closing. Other general aviation airports in Sacramento County are crowded, and Lincoln Airport is the only Placer County airport which has a large growth capacity. The Lincoln Airport Authority has proposed major improvements to the airport over the next twenty years. These improvements are detailed in the Lincoln Municipal Airport Layout Plan (September 1979).

Figure 1-4 shows the future area wide circulation system. In the amended Public Facilities Element, support is affirmed for construction of the SR 65 bypass with interchanges at Eight Mile Drive, Westwood Blvd./Moore Road and Nelson Lane (Policy 5.6). The city will also cease issuance of building permits for new projects within the city when a Level of Service (LOS) of D has been exceeded during the average workday at either the intersection of SR 65 and Lincoln Parkway or SR 65 south of Auburn Ravine, unless a source of funding has been secured for either the construction of this project or an alternative project that would improve the level of service (Policy 5.7).

It is also the goal of the city to see a thirty-five percent reduction in trips generated by new employment. Policies that support that goal include Rideshare, public transit funding and improved service and encouraging new development to be pedestrian friendly.

SR 65 from Roseville to Lincoln has been designated a *transit corridor* in the Placer County General Plan. The *transit corridor* designation is intended to encourage the development of land use and design standards that promote the viability of high-capacity transit in those corridors where there is a significant amount of undeveloped or re-developable land. As population and employment in southern Placer County increase, there will be greater opportunities for transit use. These opportunities can be maximized with planning aimed at concentrating higher intensity development and ensuring good transit accessibility.

It is the goal of the Transportation and Circulation Element of the Placer County General Plan to provide for the long-range planning and development of the county's roadway system to ensure the safe and efficient movement of people and goods. Policy 3.A.15 states that Placer County shall participate with other jurisdictions and the Department in the planning and programming of improvements to the State highway system, in accordance with state and federal transportation planning and programming procedures, so as to maintain acceptable levels of service for Placer County residents on all State Highways in the county. Placer County shall participate with the Department and others to maintain adopted LOS standards in proportion to traffic impacts from locally generated traffic.

Placer County Congestion Management Program

Passed by California voters in 1990, Proposition 111 added nine cents per gallon to the state fuel tax to fund local, regional and state transportation projects and services. It also required counties with a population over 50,000 to designate a congestion management agency (CMA), whose primary responsibility is to coordinate transportation planning, funding and other activities in a congestion management program (CMP). The Placer County Transportation Planning Agency is charged with developing this framework. The CMP system includes all state highways in the county, including SR 65.

One of the primary purposes of the CMP is to establish policies and processes, which would encourage the identification and funding of "comprehensive strategies needed to develop appropriate responses to transportation needs." The basic requirements of the CMP include the following:

Designation of a roadway system including all state highways and principal arterials. SR 65 is part of the roadway system in Placer County and is designated a principle arterial.

- Adoption of traffic level of service (LOS) standards to be applied to the roadway system. The standard must be no lower than LOS "E" or the current level (whichever is worse).
- **Establishment of standards for the frequency and routing of public transit, as well as coordination between separate operators**. The overall goal of Placer
 County's transit standards element is to attract more riders to transit systems
 while maintaining standards for cost effectiveness required either by State law or
 those set forth in the Short Range Transit Plans of the individual transit operators.
 Routing standards are approached at a corridor level to provide transit operators
 with maximum flexibility in locating service routes within each corridor. Transit
 corridors are centered on the key highways in Placer County. SR 65 is a
 designated Transit Corridor. As such, transit services shall be provided within a
 one mile wide corridor of SR 65 between Lincoln and Roseville by January, 1999
 with a minimum of one run during the morning peak period and one run during
 the evening peak period.
- A trip reduction and travel demand element, including the adoption and implementation of local ordinances. The Placer County Congestion Transportation Commission has adopted a Model Trip Reduction Ordinance (TRO) which fulfills both the requirements of the CMP and California's Air Quality regulations. The Air Pollution Control District has determined that this TRO is consistent with the Placer County Air Quality Attainment Plan. The City of Lincoln has adopted a TRO plan similar to this model.
- A program to analyze the transportation impacts of local land use decisions. The Land Use Analysis Program is intended to improve the linkage between local land use decisions and regional transportation facility decisions, to assess regional air quality impacts, to better assess the impacts of development in one community on another and to promote information sharing between local governments when the decisions made by one jurisdiction will have an impact on another. The PCTPA will act as a resource to local governments in performing transportation analysis of land use changes on the CMP designated transportation network. The Placer

County Travel Model will be used to analyze local General Plan amendments and other major development decisions.

A seven-year Capital Improvement Program (CIP) to maintain or improve traffic level of service and transit performance standards. Projects that are included in the Regional Transportation Improvement Program (RTIP) must first be included in the Capital Improvement Program (CIP). The CIP is a seven-year program developed to maintain or improve the traffic levels of service and mitigate regional transportation impacts identified through the land use analysis program.

Placer County Transportation Planning Agency Regional Transportation Plan

The Regional Transportation Plan (RTP) is designed to be a blueprint for the development of a balanced, comprehensive, multi-modal transportation system, and pending review will eventually become the Placer County portion of the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan. The RTP includes a policy element that describes the short and long-range goals of the Plan, an action element that describes the programs and actions necessary to implement the Plan and assigns responsibilities and finally, a financial element that summarizes the cost of implementation.

The Action Element identifies short and long-term projects required in order to meet the goals of the Plan. The SR 65 Lincoln bypass is included in the list of projects with expected funding. In order to fulfill the goals of the Plan, funding must be secured and the project must be programmed in the Regional Transportation Improvement Program (RTIP).

State Transportation Improvement Program (STIP), Regional Transportation Improvement Program (RTIP) and Inter-Regional Transportation Improvement Program (ITIP)

The State Transportation Improvement Program (STIP) is one of three documents used to allocate funds for individual projects by the California Transportation Commission. Senate Bill 45 (Kopp, 1997), the landmark STIP reform legislation, changes the STIP from nine programs to essentially two; the Regional Improvement Program (RIP) directed by regional transportation planning agencies (RTPA's) and the Inter-regional Improvement Program (IIP) controlled by the Department. The Regional Transportation Improvement Program (RTIP) and Inter-regional Transportation Improvement Program (ITIP) are the documents containing projects nominated to be adopted into the STIP. The adopted STIP identifies the transportation improvement funding commitments for that cycle. The SR 65 Project is included in the 1998 ITIP as well as the 1998 STIP and the RTIP.

1.3.12 Other Transportation Projects In The Vicinity

Roseville Bypass

Southern Placer County, in the vicinity of Roseville, Rocklin and Lincoln is a fast growing area. In response to the planning pressures in the area, and as a condition of funding for the Roseville Bypass, the South Placer Policy Committee (SPPC) was formed. The committee members included representatives from the cities of Roseville, Rocklin, Lincoln and Placer County. The committee also included ex-officio members of the cities of Auburn and Sacramento, Sacramento County and the Intergovernmental Relations Advisory Committee. The policy plan adopted by the SPPC includes the following five elements: land use, transportation, public facilities, housing and local jurisdiction coordination.

On June 27, 1980 the CTC passed a motion endorsing the construction of the Roseville Bypass, which allowed extensive economic and community development in the South Placer County Area. In August 1980, the CTC approved partial funding for the Roseville Bypass and in 1987 the Roseville Bypass was completed extending from I-80 to Pleasant Grove Creek Bridge. The Roseville Bypass is a four-lane expressway with an interchange at Harding Blvd, Blue Oaks Blvd and Pleasant Grove.

SR 65, Blue Oaks Blvd. to Industrial Ave.

This project extends from Blue Oaks Blvd. to Industrial Avenue, KP 13.0/21.0 (PM 8.3/12.8). It is proposed to widen SR 65 from a two lane to a four lane expressway and construct an interchange at Twelve Bridges Dr. The interchange is a separate project funded jointly by the SR 65 JPA and the city of Rocklin. It is under construction and expected to be completed by 2001.

Wheatland Bypass

The Department's long-range plans are to construct a bypass around the town of Wheatland, just north of Lincoln and Sheridan. A Project Study Report (a scoping document) has been prepared. The proposed project extends from the Lincoln Bypass, across the Bear River to KP R39.0 (PM R24.0) on SR 65 in Yuba County, about five miles past Wheatland.

State Routes 70 and 99 Transportation Corridor Study

SR 65 ties into the transportation corridor which encompasses State Routes 70, 99 and 65, connecting Sacramento to the growing cities of Roseville, Rocklin, Lincoln, Marysville/Yuba City and on up through Oroville to Chico.

The SR70/99 Corridor Study (SACOG & BCAG, July 1990) was requested by the CTC responding to a need to provide the Marysville/Oroville/Chico area with freeway access. The Corridor Study is to be used as the basis for future transportation

investments in the area. It evaluated 24 possible freeway alignments between Chico and Sacramento, using either SR 70 or 99 as the principle alignment. A Technical Advisory Committee (TAC) and a Political Advisory Committee (PAC) compared the efficiency, environmental and social impacts and economy of each alternative and recommended further study.

Table 1-9 shows transportation projects proposed for the SR 99/70 corridor.

Table 1-9 Proposed Highway Improvement Projects within Rts. 65, 70/99 Corridor

E.A.*	Co/Route KP (PM)	Description	Estimated Cost (\$ in millions)	Construction Year
40180	Yuba 65 (0.5/1.5)	Install Signal and Lights & Perform Roadwork	\$0.7 Operations Project	2002
29730	Pla/Yub 65 14.9/2.9 (23.8/4.7)	Wheatland Expressway (gap closure from Lincoln Bypass to existing freeway)	\$180 Planned	Dependent on Funding
386410	Sutter 70 0.3/8.6 (0.2/5.5)	Construct four-lane expressway, near East Nicolaus from SR 99 to Cornelius Road	\$44.5	2006
386420	Sutter 70 8.0/13.3 (5.0/8.3)	Construct 4-lane expressway near Rio Oso from Cornelius Ave. to the Bear River Br.	\$51.8 (More programmed)	2006
376100	Yuba 70 1.0/11.2 (0.6/7.0)	Construct 2-lane expressway to 4-lanes, near Marysville, Bear River Bridge to 0.3 mi. south of McGowan Road	\$40.0	2006
2A272	Yuba 70 4.8/6.1 (3.0/3.8)	Construct new Interchange south of existing Algodon Road at Motorplex Parkway	\$9.0 Programmed \$1.7 to 13.5 Planned	Dependent on Phasing
297300	Yuba 65 0.97/11.3 (0.6/7.0)	Construct two lane expressway and bridge near Yuba City, SR 99 to SR 70.	\$33.2 Programmed \$118 Planned	Dependent on Funding
382220 3822U1	Butte 149, 70, 99 0.0/7.4 (0.0/4.6)	Construct 4-Lane Expressway and 2 Freeway- to- Freeway Interchanges	\$92.4	2006
372300	Yuba 70 13.6/41.5 (8.3/25.8)	Construct Marysville-Oroville expressway on new alignment-Phases 2 and 3	\$300	Dependent on Funding
372300	Butte 70 0.00/	Construct Marysville-Oroville expressway on new alignment-Phase 1; includes all PS&E	\$17	2004
434901	Sutter 99 20.8/27.7 (12.9/17.2)	Add passing lane and widen near Yuba City from Sacramento Ave. to Central Ave.	\$10.2	Completed 2000
1A4310	Sutter 99 14.0/18.8 (8.7/11.7)	Widen to four lanes from SR 70 to south of the Feather River (Includes PS&E for all phases).	\$11.0	2005
1A462	Sutter 99 36.2/45.8 (22.6/28.6)	Widen to four lanes near Yuba City from O'Banion Road to near Lincoln Rd.	\$19.6	2004
1A4610	Sutter 99 34.4/41.2 (21.4/25.6)	Widen to four lanes near Yuba City from Central Ave. to O'Banion Road	\$48.8	Dependent on Funding

1A4320 18.8/20.8 Widen to four lanes adding Bridge Capacity \$47.7 I	1A4320		ridge Capacity \$47.7	2009, Dependent on Funding
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^{*} E.A.-Expenditure Authorization, this number identifies the project in the The Department's system.

1.3.13 Social Demand/Economic Development

Growth Forecasts

Lincoln is a fast growing community. Although the project area is predominantly rural, it is located near communities in the greater Sacramento region where population growth has occurred at high rates in recent years. The Metropolitan Transportation Plan update, prepared by the SACOG in 1996, notes that "the geographical pattern of growth [in the five county SACOG region of Sacramento, Yolo, South Placer, Yuba and Sutter Counties] will follow land-use patterns already well established in the region; strong employment growth in downtown Sacramento, and high concentrations of both job and residential growth north, northeast and east of Sacramento" (SACOG 1996). The need to provide increased capacity on SR 65 is related to this pattern of growth.

As land closer to Sacramento becomes built out, areas within commuting distance of the State Capital are coming under increasing pressure to grow, primarily to provide housing. Population growth forecasts for Sacramento County and the SACOG region are reported in Table 1-10.

Employment opportunities are growing in the project area as well. Several major computer technology companies are relocating to the Sacramento Valley, primarily in Roseville and Rocklin. Employment projections for Placer County are shown in Table 1-11.

Table 1-10 Population Growth in SACOG Region

	2000	2005	2010	2015	2020	2025
El Dorado County 1	124,910	140,395	158,085	174,950	186,250	194,415
Placer County ¹	237,145	292,640	336,805	376,240	396,785	415,335
Sacramento County ²	1,218,860	1,335,283	1,459,952	1,574,720	1,646,045	1,695,498
Sutter County	78,510	88,520	98,370	109,280	121,640	134,700
Yolo County	165,20	191,210	209,035	227,130	247,905	266,325
Yuba County	61,530	69,740	78,050	87,350	97,580	107,950
Six County Total ¹	1,886,175	2,117,788	2,340,297	2,549,370	2,696,205	2,814,223
Sacto-Yolo CMSA ^{1,2}	1,746,135	1,959,528	2,163,877	2,352,740	2,476,985	2,571,573
Yuba City MSA ³	140,040	158,260	176,420	196,630	219,220	242,650

¹Excludes Tahoe Basin portion of the County.

² The City of Folsom population figures include 7,000 persons in the prison facilities. The non-prison population for future years is 69,333.

The Yuba City MSA is comprised of Sutter and Yuba counties and the cities within each county.

				- 0		
	2000	2005	2010	2015	2020	2025
El Dorado County ¹	31,917	39,513	45,556	51,510	57,629	63,096
Placer County ¹	114,812	142,646	167,611	194,159	211,468	227,510
Sacramento Co.	561,728	633,584	694,531	753,641	792,494	814,220
Sutter County	24,600	28,628	32,332	36,294	41,019	45,145
Yolo County	93,367	109,855	127,233	140,628	157,979	172,064
Yuba County	23,723	26,293	29,173	32,285	35,844	39,241
Six Co. Total ¹	850,147	980,519	1,096,436	1,208,517	1,296,433	1,361,276
Sacto-Yolo CMSA ^{1,2}	801,824	925,598	1,034,931	1,139,938	1,219,570	1,276,890
Yuba City MSA ³	48,323	54,921	61,505	68,579	76,863	84,386

Table 1-11 Employment Projections in the SACOG Planning Area

Lincoln General Plan Land Use Element

The City of Lincoln General Plan, prepared in 1988, addresses future growth within the City boundaries and in adjoining areas within the City's sphere of influence. The Planning Area includes approximately 7776 ha (19,500 acres or 30 square miles) and is generally bordered by Athens Avenue on the south, Sierra College on the east, Fiddyment Road, the Lincoln Airport on the west and Virginiatown Road/SR 65/West Wise Road on the north. The planning area is further broken up in sub-areas (see Figure 1-5). Table 1-12 summarizes the amount of new development that is currently being proposed within the Lincoln Planning Area. For the location of these developments, please refer to Figure 1-6. Development of these areas at build out could result in approximately 21,085 new residential units; 554 ha (1,369 ac) of industrial land, 132 ha (325 ac) of commercial lands, with a resulting population increase of approximately 55,031 people, bringing the total population of the area to 62,899 (Lincoln, 1994).

This does not include the urban reserve areas. Under the policies of the General Plan, areas designated as Urban and Industrial Reserve are not contemplated for development during the planning horizon used for the General Plan and agricultural areas are not considered buildable. Urban and Industrial Reserves are intended to provide a long term direction for future land uses as demands change. At this time, they only represent future development potential.

¹ Excludes Tahoe Basin portion of the County.

² The Sacramento-Yolo CMSA is comprised of El Dorado, Placer, Sacramento, and Yolo counties and the cities within each county.

³ The Yuba City MSA is comprised of Sutter and Yuba counties and the cities within each county.

Table 1-12 Development Proposals within the Lincoln Planning Area

Residential Projects	ais within the Lincoln I laming A	
Brookview IV	209 Single Family Residential	23.4 ha (58 ac)
Lakeside Dr. Estates	98 Single Family Residential	Not available
Teal Hollow Subdivision	341 Single Family Residential	36.8 ha (91 ac) ±
Glenmoor	207 Single Family Residential	Not available
Terra Cotta Village	7 Single Family Residential	Not available
Aspen Meadows	87 Single Family Residential	Not available
Twelve Bridges Area A	4,331 Unit Planned Development	1209.6 ha (2,989 ac)
Twelve Bridges Sun City Lincoln Hills	6,800 Unit Planned Development	1191.8 ha (2,945 ac)
Twelve Bridges Area C	100 Unit Planned Development	20.23 ha (50 ac)
Lincoln Crossing	2,985 Unit Planned Development	433.0 ha (1,070 ac)
Three D	322 Unit Planned Development	42.1 ha (104 ac)
Industrial/Commercial Projects		
Lincoln Hills Town Center Shell Station	Gas Station and Car Wash	Not available
Sterling Pointe	Commercial/Industrial property	31.1 ha (76.83 ac)
Lincoln Center Chevron Facility	Gas Station, Convenience Store, Fast food Restaurant, Car Wash, Card Lock	0.91 ha (2.25 ac)
Joiner Parkway Self Storage Facility	28499 m ² of storage (93,500 ft ²)	1.86 ha (4.6 ac)
Joiner Parkway Plaza	Commercial, food mart, gas station, car wash	0.88 ha (2.18 ac)
Eskaton	230 unit Senior Housing	Not available
Crosswinds Hangars	5 Hangars	1.73 ha (4.28 ac)
AB Tools Facility	7681 m ² (25,200 ft ²) Industrial facility	0.97 ha (2.4 ac)

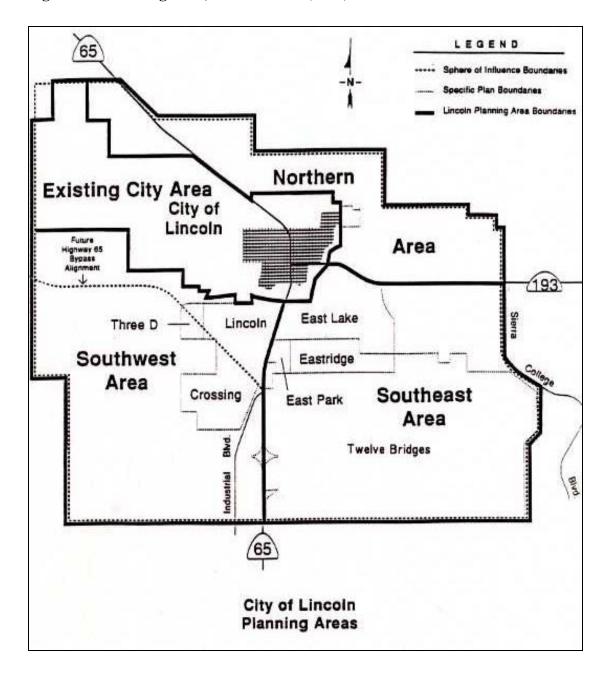


Figure 1-5 Planning Area, General Plan (1988)

Figure 1-6 Development Activity in the SR 70,99,65 corridor

The Lincoln General Plan anticipates an increase in the population of Lincoln to anywhere between 19,000 to 39,000 by the year 2010. In 1988, about six square miles (20 percent) of the planning area were developed with residential, industrial, commercial or other developed uses. To accommodate the anticipated growth, the General Plan designates approximately 35.4 km² (22 mi²) (73 percent) of the Planning Area under these uses (including 12.2 km² [7.6 mi²] designated as urban reserve). The remaining eight square miles (approximately) are designated to remain in agricultural uses including crop production and rangeland. This area is predominantly in the southwest portion of the planning area.

Table 1-13 summarizes the amount of new development that is currently being proposed within those portions of the Lincoln sphere of influence that are given urban land use designations, taken from the 1994 General Plan Amendment (Lincoln, April 1994). This table corresponds to the sub-areas shown in Figure 1-5.

Table 1-13 Lincoln General Plan Land Use Summary

	So	outhwe	est	So	outhea	ast		st Line		N	orthea	ast		Nort	h
	DU	AC	DEN	DU	AC	DEN	DU	AC	DEN	DU	AC	DEN	DU	AC	DEN
Low Density	1913	468	4.1	6771	234	2.9	1177	294.0	4.0	1785	510	3.5	?	2	~
Med. Density	815	94	8.6	2895	383	7.4	1480	252.0	5.9	~	?	~	?	?	~
High Density	0	0	0	3240	161	20.1	1009	57.5	17.5	~	?	~	?	?	~
Total Res.	2728	562.4	4.85	12906	2886	4.47	3666	603.5	6.07	1785	510	3.5	?	~	~
Industrial	~	~	197.2	~	~	171.0	~	~	653.3	~	~	~	343	~	~
N. C.	~	~	~	~	80.6	~	~	14.8		~	~	~	~	~	~
Gen. Comm.	~	27.7	~	~	98.0	~	~	62.9	~	~	~	~	~	~	~
B/P	?	14.5	~	~	17.4	~	~	9.0	~	~	~	~	~	~	~
Open Space	~	301.1	~	~	1323	~	~	328.5	٠	~	65	۲	~	~	~
School	~	34.2	~	~	115.0	~	~	90.1	~	~	14	~	~	~	~
Other Public	~	13.4	~	~	40.0	~	~	310.5	~	~	~	~	~	~	~
Parks	~	44.1	~	~	270.0	~	~	65.9	~	~	24	~	~	~	~
Golf Course	?	161.8	~	~	393.0	~	?	~	~	~	?	~	?	?	~
Total		1356.3	3	Į į	5394.0			2335.8			613	::4		343	

DU: Dwelling Units NC: Neighborhood Commercial AC: Acres BP: Business/Professional DEN: Density (dwelling units per acre)
Gen. Comm.: General Commercial

Placer County General Plan Land Use Element

The SR 65 Lincoln Bypass Study Area lies partially within the City of Lincoln and partially within unincorporated Placer County. Current land use in this portion of Placer County is predominantly agriculture. According to the 1994 County General Plan land

use map (updated in 1997), planned land use in the Lincoln area will remain predominantly agricultural for the 10- to 20-year General Plan planning horizon.

Recently, Placer County has implemented the Placer Legacy Project. The Placer Legacy Project is intended to develop specific, economically viable implementation programs that focus on the preservation of open spaces in order to maintain the abundance of the existing diverse natural habitats while supporting the economic viability of the County and enhancing property values. The Citizens Advisory Committee, the Interagency Working Group and the Scientific Working Group all work under the umbrella of the Placer Legacy to develop programs where no programs currently exist and strengthen existing programs.

Sutter County General Plan Land Use Element

Sutter County is predominantly agricultural with 93 percent of the County's acreage in farms (U.S. Census, 1990). County policies, reflected in the General Plan, include preservation of agricultural uses and concentration of development around existing communities. Residential development for the area closest to Lincoln will likely be limited to the rural communities of Rio Oso and East Nicolaus/Trowbridge in the foreseeable future. Table Table 1-14 summarizes land use decisions in Sutter County.

Table 1-14 Sutter County Land Use

What	Where	Status	Area	Details
Sutter Cour				
Sutter County General Plan	Sutter County	Approved	2130 ha (5263 ac)	Residential, commercial, business park, public uses. General Plan includes construction of 11,747 homes.
Sankey Road Indian Casino	SE of Sankey Rd/SR 99 South of SR 70/99 Split	decision	97 ha (240 ac)	Recreation complex; 50,000 sq. ft. gaming facility/restaurant, 18 hole golf course, RV park, tribal office, conference room.

The General Plan designates up to 1417.5 ha (3,500 ac) of the southern portion of the County, adjacent to Sacramento County, for future industrial/commercial development. This area is so designated because of its proximity to transportation corridors (SR 70 and 99) and the Sacramento Airport.

Unincorporated Yuba County

Yuba County's General Plan, adopted in 1996, addresses a 20-year planning horizon. The 1995 population was estimated at 64,096. This population is expected to grow to 95,000 by 2015. Yuba County includes the incorporated city of Wheatland and the unincorporated communities of Olivehurst and Linda. Table 1-15 describes land use decisions made by Yuba County. Most future growth is expected to occur within these established communities. The remainder of the Study Area is primarily devoted to agricultural uses.

Yuba Count	Yuba County and Communities						
Ostrom Road Landfill	East of SR 65 on S. Beale Rd.	Expansion Approved	29 million additional cubic yards, 221ac	Allows hundreds of tons of increased operations per day			
Bill Graham Presents & Arciero Motorplex	Forty-Mile Road east of SR 70	Most Elements Approved	765 ha (1890 ac)	Auto racing (40,000 person capacity in largest facility), golf course, commercial complex and 20,000 seat amphitheater			
Plumas Lake Specific Area	West side of SR 70 in South Yuba Co.	Active Map 6,463 Dwelling Units	526 ha (1300 ac)	Residential development/some industrial and commercial uses. Plan allows up to 11,800 homes.			
East Linda Specific Plan	East of SR 70 along North Beale Road	Active Map applications for 1,826 dwelling units	654 ha (1617 ac)	Residential portion of development allows up to 5500 new units to join 514 existing dwelling units			
North Arboga	Along SR 70	Active map; 125	Not	Residential portion of development allows			
Study Area	near SR 65	dwelling units	available	for 2800 dwelling units			
	City of Wheatland						
	West of SR 65 at	r r	86 ha	Residential development; initial application			
Parcel Map	the High School	submitted	(212 ac)	requesting 522 dwelling units			

Table 1-15 Yuba County Land Use

At General Plan build-out, about 49 005 ha (121,000 ac) would be under Valley Agriculture use. This includes most of the portion of Yuba County within the Study Area. The General Plan calls for retaining agriculture as the primary land use in this area and protecting the agricultural community from encroachments which "would be injurious to the physical and economic well being of the agricultural community." The Yuba River corridor lies along the northern boundary of the Study Area. The General Plan calls for maintaining this open space corridor while accommodating compatible recreation and wildlife uses.

The General Plan anticipates highway improvement projects, including improvements to SR 70 and the SR 65 bypass around the City of Wheatland.

City of Wheatland

The City of Wheatland, located on SR 65 about 1.6 km (1 mi) north of the Bear River, had an estimated population of about 1,893 in 1989. Beale Air Force Base, located about 12.9 km (8 mi) northeast of Wheatland, has had a major influence on the growth of Wheatland and all of Yuba County.

The dominant land use in the Wheatland area is agriculture, primarily irrigated crops and orchards. The Wheatland General Plan (1980) recognizes the importance of agriculture to this rural community and sets goals of preserving the highest quality agricultural lands for agriculture and open space uses. Rivers, creeks and sloughs are also recognized as valuable resources and are designated for conservation and protection from urbanization.

In 1980, there were 195.4 ha (485 acres) of land within the Wheatland city limits, about 94.4 ha (233 ac) of which were undeveloped. The General Plan anticipates

capacity for 5,500 people within the city limits. Because of the large proportion of undeveloped land within the city limits (94.4 ha [233 ac]), the General Plan does not consider future development outside of current city limits.

In response to increasing development pressure in the early 1990s, the City of Wheatland prepared the 1995 Specific Plan to address future development of approximately 86.7 ha (214 ac) of vacant land within the northern half of the City. Full buildout of the Specific Plan area would yield a theoretical population of about 5,000 people within the current Wheatland city limits. The Wheatland General Plan anticipates construction of a freeway bypass of the city.

1.3.14 Flooding and Route closure

SR 65 within the project limits has been closed 33 times from 8/23/80 to 12/08/98 due to various factors such as maintenance, flooding, accidents and train derailments in Sheridan. Table 1-16 lists the road closures.

Table 1-16 Route Closures

Postmile	Location	Reason	Duration of Closure
9.5/12.9	Between Placer Blvd. And Industrial Blvd.	Accident-Eight fatalities	4 hours
20.9/21.7	Sheridan Rail Road crossing	Train derailment	2.5 hours
13.8/14.0	Between 4 th and 5 th St.	Filming a movie	5.5 hours
13.8/14.0	Between 4 th and 5 th St.	Southern Pacific RR realigning a spur track.	6.75 hours
23.4	South Beale Rd.	Major flood in Linda	16.3 hours
12.3	One mile south of Lincoln	Truck accident, Two fatalities	3.2 hours
9.5/13.0	Sunset Blvd. To Industrial Blvd.	Road rehabilitation	2.5 hours
12.8	Industrial Blvd.	Accident-Two fatalities	0.5 hour
22.9	2 miles south of Wheatland	Accident, One fatality	1 hour
13.9	6 th St.	Flooding	3.75 hours
13.7	Junction of SR 193	Drill testing. Planned closure	12 hours
13.8	5 th St.	Hazardous waste spill	7.5 hours
13.8	5 th St.	Ruptured water main.	1.1 hours
17.3/21.6	3-7 miles south of Lincoln	Accident, Two fatalities	1.6 hours
13.9	6 th St.	Flooding	4.5 hours
13.1	Moore Rd.	Flooding	1.4 hours
13.7	Junction of SR 193	Flooding	2.5 hours
21.6	South of Sheridan	Four vehicle accident	1.5 hours
13.1	Moore Rd.	Accident-One fatality	2.5 hours

2 PROPOSED ALTERNATIVES

Using comments from the City of Lincoln, Placer County, the Resource Agencies including U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (FWS) and Army Corps of Engineers (ACOE) and the community, Caltrans and FHWA developed numerous alternatives to meet the transportation needs of the community while preserving the natural habitat of the area. The final recommended alternative will be based on the extent to which the project meets the stated purpose and need, design standards, public input, comparison of the environmental impacts, comments received at the public hearing and by correspondence and is the least environmentally damaging practicable alternative.

This environmental document considers seven alternatives: the "No Build" and six "Build Alternatives": A5C1, AAC2, D1, D13, D13 South Modification and D13 North Modification. Considerable effort went into designing a facility that minimized impacts to the wetland areas and residences while providing adequate relief from traffic congestion and improving inter-regional movement of goods and services.

The following screening criteria considered necessary to achieve the projects purpose and need were developed in cooperation with the FWS, the ACOE and the EPA:

- The project should improve service levels and maintain, at a minimum, LOS D in the project area through the year 2020.
- The project should improve and maintain traffic and pedestrian safety in the project area.
- The project should minimize displacement of existing residences and businesses.
- The project should minimize impacts to wetlands and listed species.
- The project should be constructed at a reasonable cost.

The alternatives discussed below and shown in Figure 2-1 were developed with these screening criteria in mind. A full range of alternatives that included a highway bypass, non-highway options or improving the existing alignment though the City of Lincoln were investigated through the Major Investment Study (MIS). Some of these approaches either did not meet the project's purpose or need, or did not meet some or all of the screening criteria. These alternatives are described in the section labeled "Alternatives Withdrawn From Consideration" which follows this section.

This project is a Category 1, which involves a route adoption, the acquisition of new right-of-way, access control and a freeway agreement with the City of Lincoln and Placer County.

Figure 2-1 Proposed Alternatives

2.1 PROPOSED ALTERNATIVES

All of the alternatives are described from south to north.

2.1.1 Alternative AAC2 and A5C1

The AC alternatives both begin approximately 0.5 km (0.3 mi) south of Industrial Blvd. at KP 20 (PM12.5). The alignment curves in a northwesterly direction and proceeds over Industrial Blvd. and the Union Pacific Transportation Company (UPTC) tracks, intersecting Moore Road approximately 607 m (1992 ft.) from the Moore Road/Joiner Parkway intersection. The line turns in a northeasterly direction approximately 2.4 km (1.5 mi) west of the existing alignment.

At Nicolaus Road, the AA line was set approximately 335 m (1100 ft) east of Lakeside Drive from Nicolaus Road, the AA and A5 lines continue on a north-northeast bearing until it nears the UPTC tracks where it curves to the left. At this point, the C portion of the alignment takes over.

The A5C1 and AAC2 lines share an alignment for approximately 2.5 km (1.6 mi). Just south of Coon Creek, the AAC2 alignment stays roughly parallel with the SR 65, while the A5C1 alignment veers northwest for about 1470 m (4800 ft), then veers north, eventually merging with the AAC2 alignment at Riosa Road. These alignments continue to north of Sheridan where, similar to D1 and D13 lines, they tie back into the existing facility. The A5C1 has less right-of-way impact on the agricultural land north of Wise Road; as a result A5C1 is slightly longer than AAC2.

The AC lines provide access to the Lincoln area and conform to the local planning policy. The A5C1 and AAC2 alignments were developed in recognition of the difficulty and expense required to upgrade existing SR 65 to a freeway north of Lincoln, and the expense and maintenance problems of a second railroad crossing. The AC lines eliminate the existing Sheridan at-grade railroad crossing and the proposed north railroad crossing on the A corridor. Currently 23 trains per day pass through Sheridan.

The advantages of the AC line are as follows:

- The AC alignment eliminates the need for a new railroad separation at the north end of the A alignment.
- The AC lines provide for 18.8 km (11.7 mi) of ultimate freeway with access control as compared to a maximum of 8.7 km (5.4 mi) on a "A" alignment construction.

One disadvantage of the AC alignments is that the first 2.9 km (1.8 mi), after leaving the "A" corridor, is through areas supporting high quality vernal pools. In addition, since these alternatives were developed, numerous housing developments have been constructed in the path of these alternatives since a highway corridor had not been

established. Thus, in addition to increased impacts on local residents, there would be the associated increase in right-of-way costs and possible soundwalls.

Staging construction for A/C line.

A temporary railroad separation and connection at the north end of the Lincoln Bypass would be required for this alternative. A four-lane expressway would be constructed from Industrial Blvd. to Nicolaus Road and a two-lane expressway would be constructed from Nicolaus Road to the connection with SR 65 south of Wise Road.

The "temporary" connection could be relinquished to local agencies after construction of the C line west of the railroad tracks. The connection could be designed for integration of the railroad separation into the local street system upon relinquishment. This provides a railroad separation for future local traffic north of Lincoln and reduces the initial cost of the project.

2.1.2 Alternative D1

The D1 alternative begins at the same location as the A alignments south of Industrial Blvd. This line crosses the railroad tracks and turns in a northwesterly direction proceeding to the west side of the Lincoln Airport. South of Auburn Ravine, the impact on wetlands is similar to the A line. From near Auburn Ravine to west of the airport, the D1 line passes through an area of scattered single family dwellings. This line would require one to five residential acquisitions and may be sufficiently close to as many as ten other residences to require soundwalls.

West of the airport near Nicolaus Road, the D1 line veers north. Land use in this area is agricultural with a mix of irrigated and dry farming techniques. Terrain throughout the D1 line is flat to slightly rolling hills. Vernal pools are located at several points along the center section line. By shifting the alignment to the west slightly, several vernal pools can be avoided, but an additional residence would be impacted.

After Nicolaus Road the D1 line turns northwesterly, parallel to and about 610 m (2001 ft) west of the existing highway. North of Sheridan, the D1 line reconnects with the existing SR 65 west of the railroad tracks. This avoids re-crossing the railroad tracks as would be necessary if the connection was constructed south of Sheridan.

Right-of-way for future interchanges would be acquired at Nelson Lane, Riosa Road and either Nicolaus Road or Wise Road. The Nelson Lane Interchange would serve Lincoln Airpark. Nelson Lane would, therefore, need to be reconstructed to handle the increased traffic.

2.1.3 D 13 Alternative

The D 13 alternative commences 0.48 km (0.3 mi) south of the intersection of existing SR 65 and Industrial Boulevard at approximately KP 20 (PM 12.5). This alignment deviates from the existing highway just south of its intersection with Industrial

Blvd. Crossing over Industrial Blvd. and the Union Pacific Transportation Company's tracks, the D 13 alignment proceeds in a westerly direction. The alignment intersects Moore Road and Nelson Lane before turning to the north crossing Nicolaus Road and passing the Lincoln Airport to the west. The alignment continues in a northerly direction for approximately 5.64 km (3.5 mi) before swinging northwest toward Dowd Road. The D 13 alignment crosses Dowd Road approximately 91.4 m (300 ft) north of the intersection with Dalby Road. Continuing in a northwest direction, the alignment intersects Riosa Road and rejoins the existing highway 0.16 km (0.1 mi) from the Bear River. The D 13 alignment is 20.6 km (12.8 mi) long. The D 13 alignment shares the same staged construction design, interchange connections and similar stream crossings and channel relocation as the D 1 alignment.

The D 13 alignment was developed in response to public reaction to the D 1 alignment impacts to residences on Rockwell Lane and in an effort to reduce impacts to wetlands at the south end of the bypass.

2.1.4 D 13 South Modification

The D 13 modifications were developed in response to several factors. At the open house on September 22, 1999, a number of citizens proposed a plan that would move the D 13 alternative further away from the residential development located near Auburn Ravine and First Street. One proposal was to use the D 1 alignment from Industrial Boulevard to Nelson Lane with D13 from Nelson on. (Figure 2-2) This looked easy on paper, but geometrically, it was more problematic. In order for it to be a safe facility, a whole new alternative would have to be drawn between Industrial Blvd. and Nelson Lane, splitting the difference between the D 1 alternative and the D 13 alternative.

D13 North Modification

At the north end of the project, modifications were explored to avoid the Conservation Easement property shown in Figure 2-4Figure 2-1. The D 13 North Modification is identical to the D 13 alignment until Waltz Road, where it veers slightly to the east then makes a beeline to SR 65. This alignment has some advantages over the D 13 alignment including slightly less impacts on Oak woodlands, vernal pools and wetlands, in addition to avoiding the Conservation Easement property. It is also shorter and more direct than the D 13 alternative. Table 2-1 compares the D 13 alternative with the D 13 modified alternatives.

Table 2-1 D13 Alternative Impacts

Alternative	Wetland Impacts	Vernal Pool Impacts	Oak Woodland	Residents affected
D 13	5.3 ha (13.1 ac)	2.2 ha (5.4 ac)	3.5 ha (8.6 ac)	10
D 13 South Modification	5.0 ha (12.3 ac)	2.4 ha (6.0 ac)	0.2 ha (0.4 ac)	11
D 13 North Modification	4.9 ha (12.1 ac)	2.0 ha (4.9 ac)	3.4 ha (8.4 ac)	10

2.1.5 Park And Ride / Braided Ramps

It is proposed to secure right-of-way for future braided ramps and a park and ride facility as a part of this project. The park and ride facility will be located within the proposed right-of-way for the braided ramps and the existing state right-of-way adjacent to the Industrial Blvd. and SR 65 intersection. The geometric layout of the park and ride can be designed independently from any alignment selected. It is proposed to build the first stage of the park and ride facility that will accommodate approximately 120 cars with the possibility of increasing to 1200 cars for future demand. The number of proposed total-parking stalls incorporates the landscape area but not the area for the future braided ramps or the park and ride lot connector; therefore, the maximum number of future stalls might decrease slightly. While the demand for a park and ride facility extends to Sheridan, the majority of the demand is located in the City of Lincoln; therefore, a single park-and-ride facility location was preferred over multiple facilities. Considering the size and central location of the proposed park and ride site, a single location can more easily be incorporated into the local transit routes and if Sacramento Regional Transit were to decide to extend rail service to the area, can also serve as a possible parking lot for light-rail commuters. The cost of the right-of-way for this area, which is approximately 11.4 ha (28.3 ac), is \$2,500,000. This item has been discussed with the District 3 Ride-Share Coordinator as well as local officials from the City of Lincoln.

2.1.6 Utility Relocation

Some utilities will need to be relocated for this project, however, at this time, it is not known where they will be moved. A Utilities Conflict Map will be developed when the preferred alternative has been chosen. From that map, new locations will be determined and evaluated for environmental impacts. That information will be available in the final environmental document.

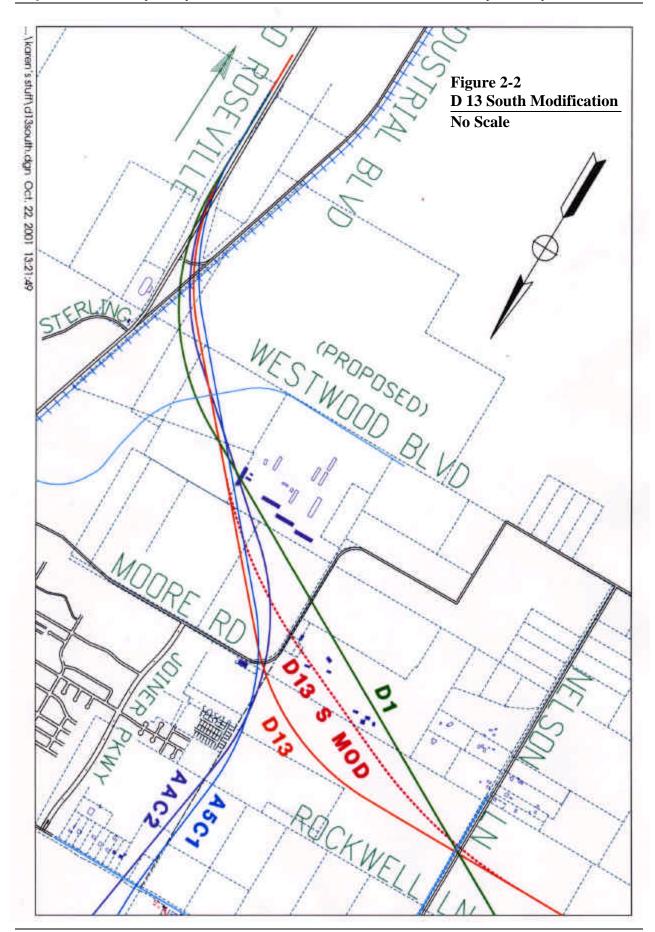


Figure 2-3 Park and Ride/Braided Ramps

Figure 2-4 D 13 North Modification

2.1.7 Non-Standard Features

There are several non-standard features associated with this project; the Industrial Boulevard interchange, the north connection to the existing SR 65, the project's first stage, minimum profile grade and minimum distance between two successive ramps or interchanges.

The interchange at Industrial Boulevard will be designed as a half diamond interchange. Constructing a full diamond interchange required an at-grade crossing of the railroad tracks for the northbound traffic. The existing and future alignment of Industrial Boulevard will remain just east of and parallel to the railroad. To be able to build a northbound on-ramp at the Industrial Blvd, a "U" shape northbound on-ramp should be configured. This requires a large amount of right-of-way to be acquired. This movement will be served by the future Westwood interchange. A study performed by the office of Traffic Forecasting & Modeling confirmed that without this half diamond interchange the quality of traffic operations in the south vicinity would diminish.

The temporary connection of the Lincoln Bypass to existing SR 65, north of Sheridan, will have a lower design speed than the adjacent freeway. The design speed would be reduced from 130 km/h to 110 km/h (80 mph-68 mph), which is clearly more than the allowable 15-km/h (9 mph) difference.

The project's first stage, consisting of 4-lanes from beginning to Nelson Lane and 2-lanes from Nelson Lane to the end, restricts the term of "Freeway" to be used to describe the entire project. The 2-lane portion of the project contains several at-grade intersections and areas of controlled access, therefore, this portion of the route will be a "Controlled Access Highway."

A design exception, regarding minimum distances between two successive ramps or interchanges, may be needed if the City of Lincoln maintains the position and location of their local roads where they intersect with the proposed bypass (e.g. Westwood Blvd). The minimum interchange spacing is 1.5 km in urban areas. Since the City of Lincoln proposed to build the Westwood Interchange, they are preparing their own Project Study Report (PSR). A design exception regarding this issue will be submitted concurrently with their PSR of the Westwood Interchange.

2.1.8 Phasing of Construction

Because of fierce competition for transportation dollars in Placer County, funding for this project has been limited. However, the need remains for some relief to the congestion in the city of Lincoln. In order to balance the need for the project and limited funding, construction will be phased to address the current need, then as congestion increases, funding will be allotted for the completion of the freeway.

There will be two phases to the project, the minimum build and ultimate project. The minimum build is to construct a four-lane freeway with interchanges from Industrial Boulevard to Nelson for the D corridor and Nicolaus for the A corridor. At that point, a two-lane highway will be built to the end of the project. As the need arises due to increased congestion and as funding becomes available, the additional two lanes will be added, and intersections will be converted to interchanges.

2.1.9 Relinquishment of Existing SR 65

The portion of existing SR 65, not re-designated Route 193, will be relinquished to Placer County according to Section 73 of the Streets and Highway (S&H) Code. The S&H Code requires the "highway" to be placed in a "state of good repair" prior to relinquishment. The cost of relinquishment varies by alternative. The relinquishment cost for AAC2, D13 and D13 North Modified is \$3.9, \$4.1 and \$3.7 million, respectively. The cost of relinquishment for D13 South Modified is \$4.1 million.

Coordination with the City and County will occur as information about funding becomes known. Permits required for relinquishment will depend on the nature of the work required as a condition of relinquishment. If a lump sum of money is given in lieu of Caltrans bringing the facility up to a good state of repair, then the permits are the responsibility of the City.

2.1.10 No Build

The "No Build" alternative would be to not build the project. However, routine maintenance and operational improvements would continue. If the "No Build" alternative were chosen, congestion would continue in the City of Lincoln. The Level of Service would continue to deteriorate to a LOS F within the city limits. The safety of the traveling public and the residents of the town would be compromised due to the continuing congestion.

The new developments occurring south and southwest of Lincoln that are currently approved will be built whether or not the bypass goes in. With the additional developments, traffic is expected to almost double by the year 2025. For more information on existing and future traffic, please see Chapter 1, Section 1.3.2.

The "No Build" alternative does not address the purpose and need of the project. Congestion will increase as the area develops. The already high accident rate can be expected to rise as congestion increases. Regional trips will be increasingly delayed and the level of service will decrease.

Two additional road connections between Industrial Blvd. and Auburn Ravine included in the City's General Plan, Westwood Blvd. and Lincoln Parkway, will provide access to newly developing areas. These connections will result in a lower level of service on the existing facility.

2.1.11 Design Modification to avoid the 4 (f) property

Alternative D13, D13 North Modified, D13 South Modified, A5C1 and D1 would cross portions of the Fickewirth Ranch, which has been determined eligible for the NRHP by the consensus of SHPO. Section 4(f) of the Department of Transportation Act of 1966 (49 USC 303) protects historical properties by requiring that a project affecting historic resources can only be allowed if there are no feasible and prudent alternatives. For more information on Section 4(f) please see Chapter 4, Section 14.

Alternatives A5C1, D1, D13, D13 South Modification and D13 North Modification pass through the 104 ha (258 ac) agricultural parcel containing the Fickewirth Ranch. The proposed alignment for A5C1 lies approximately 457 m (1500 ft) from the ranch complex. D1 and D13 and its modifications are approximately 610 m (2000 ft) from the buildings. (See Figure 4-1, showing the location of the property, ranch complex and the alternatives.) The area required runs along the eastern edge of the property. In addition, the southeast corner of the property would be required for the interchange.

Figure 2-5 shows the modification of D13 that avoids the Section 4(f) property. The D-13 alternative is shifted east beginning before the curve at Nicolaus, and then gently curves back into the original D-13 after passing the Fickewirth property. This alternative was examined in some detail as shown on the table below. There would be 11 properties affected by this alternative. Four additional properties are affected, but three properties that would have been affected by D-13 are not affected by the D-13 4(f) alternative. An additional \$300,000 would be required for right of way acquisition because of so many properties being landlocked by this alternative.

There would be an additional 2.6 ha (6.5 ac) of wetlands/waters of the U.S. affected by this alternative, including 0.8 ha (2 ac) of vernal pools. An additional 1.9 ha (4.7 ac) of oak woodlands would also be affected by this alternative.

This alternative meets good engineering standards, however, it affects more wetlands and oak habitat than the D 13 North Modified, therefore is not the "Least Environmentally Damaging Practicable Alternative" (LEDPA).

Table -2-2 Summary of Impacts; A5C1, D13 North Modified and D13 4(f)

	A5C1 Alignment	D13 North Modified	D13 4(f)
Wetlands/ Nonwetland Waters	9.4 ha (23.1 ac) wetlands/waters 6.5 ha (16.1 ac) vernal pool/swales 2.2 ha (5.4 ac) of marsh two high value vernal pool complexes	5.6 ha (13.8 ac) wetlands/waters 2.1 ha (5.2 ac) vernal pools/swales 3.1 ha (7.6) ac of marsh	8.2 ha (20.3 ac) wetlands/waters 2.9 ha (7.2 ac) vernal pools/swales 3.6 ha (9.0 ac) of marsh

	A5C1 Alignment	D13 North Modified	D13 4(f)
Special Status Species	Vernal pool fairy shrimp Ahart's dwarf rush Raptor foraging and potential nesting habitat two high value vernal pool complexes	Vernal pool fairy shrimp Raptor foraging and potential nesting habitat	Vernal pool fairy shrimp Raptor foraging and potential nesting habitat
Natural Communities Wildlife, Fisheries	80.1 ha (197.7 ac) grassland/ vernal pool 2.2 ha (5.4 ac) riparian forest 5.8 ha (14.3 ac) oak woodland	64.2 ha (158.7 ac) grassland/ vernal pool 1.3 ha (3.3 ac) riparian forest 3.5 ha (8.6 ac) oak woodland	86.8 ha (214.5 ac) grassland/ vernal pool 1.5 ha (3.6 ac) riparian forest 5.4 ha (13.3 ac) oak woodland
Water Quality	185.8 ha (59.0 ac) footprint with 11 stream crossings	172.6 ha (426.6 ac) footprint with 8 stream crossings	221.3 ha (546.7 ac) footprint with 8 stream crossings
Cultural Resources	Requires small amount of right- of-way from property eligible for National Register.	Requires small amount of right-of-way from property eligible for National Register.	None
Agricultural Land	54.4 ha (134.3 ac)	96.7 ha (238.8 ac)	87.9 ha (217.1 ac)
4(f) Involvement	Yes 1.5 ha (3.7 ac)	Yes 10.7 ha (26.5 ac)	No
Land Use/ Socio- economics	Residences: 91 Businesses: 5	Residences: 10 Businesses: 1	Residences: 11 Businesses: 1
Right of Way Costs	\$56,000,000	\$22,500,000	\$25,500,000
Cost	\$151,000.000	\$156,647,000 Minimum project \$185,402,000 ultimate project	\$159,647,000 Minimum project \$185,402,000 ultimate project

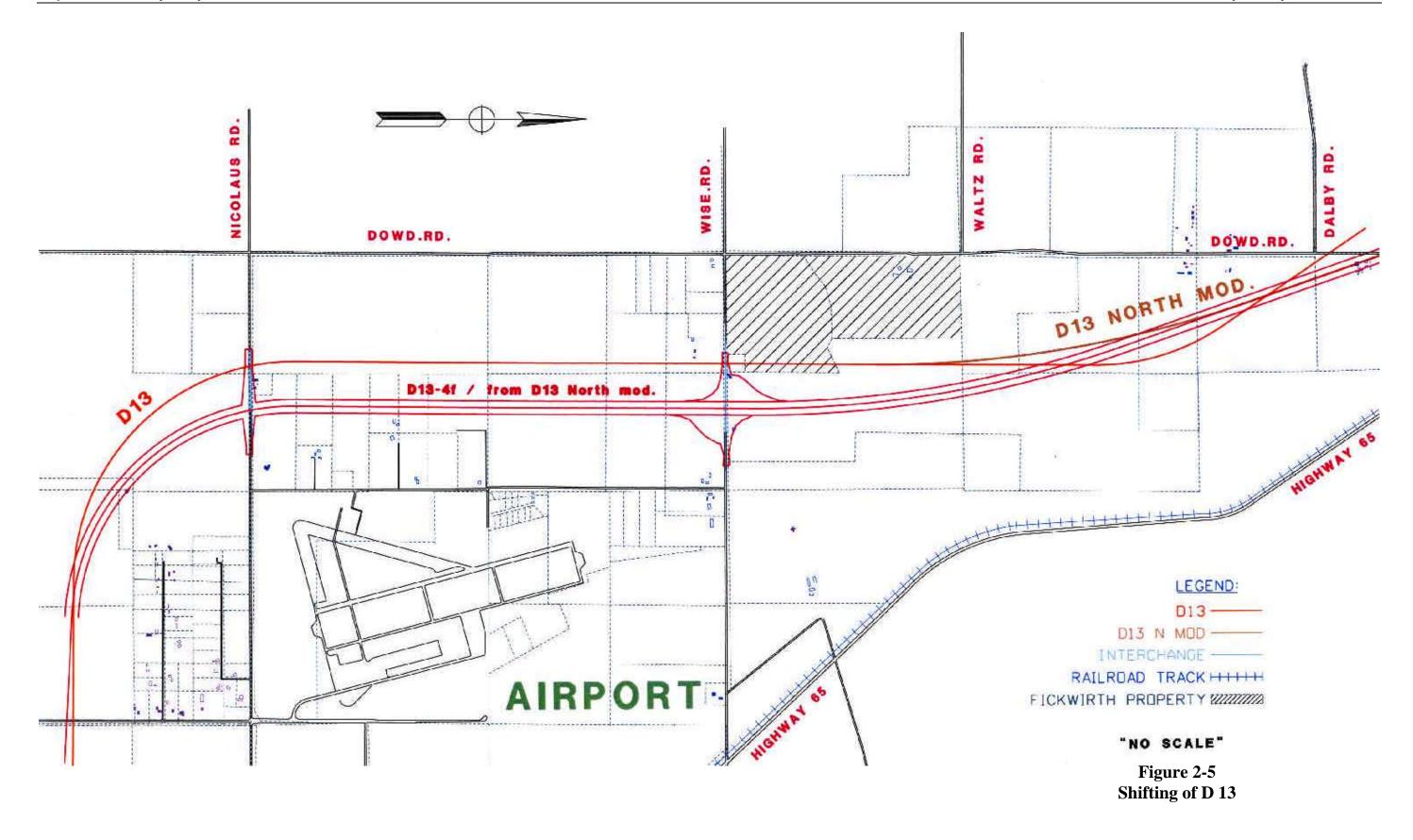
Table 2-3 Summary of Impacts A5C1, AAC2 and D1

	Summary of Impa	T	1	
	AAC2 Alignment	D13 Alignment	D13 South Modified	D1 Alignment
Wetlands/ Nonwetland Waters	6.3 ha (15.5 ac) wetlands/waters 3.3 ha (8.0 ac) vernal pool/swales 2.4 ha (6.0 ac) of marsh two high value vernal pool complexes	5.3 ha (13.1 ac) wetlands/waters 2.2 ha (5.4 ac) vernal pools/swales 2.8 ha (6.8) ac of marsh one high value marsh	6.8 ha (16.8 ac) wetlands/waters 2.4 ha (6.0 ac) vernal pool/swales 2.2 ha (5.5 ac) marsh	5.7 ha (14.1 ac) wetlands/waters 2.8 ha (6.8 ac) vernal pool/swales 2.6 ha (6.3 ac) of marsh one high value marsh
Special Status Species	Vernal pool fairy shrimp Ahart's dwarf rush Raptor foraging and potential nesting habitat two high value vernal pool complexes	Vernal pool fairy shrimp Raptor foraging and potential nesting habitat one high value marsh	Vernal pool fairy shrimp Raptor foraging and potential nesting habitat	Vernal pool fairy shrimp Raptor foraging and potential nesting habitat one high value marsh

	AAC2 Alignment	D13 Alignment	D13 South Modified	D1 Alignment
Natural Communities Wildlife, Fisheries	76.0 ha (187.7 ac) grassland/ vernal pool 1.1 ha (2.6 ac) riparian forest 10.2 ha (25.2 ac) oak woodland	50.4 ha (123.3 ac) grassland/ vernal pool 1.3 ha (3.3 ac) riparian forest 3.5 ha (8.6 ac) oak woodlan	52.5 ha (129.7 ac) grassland/ vernal pool 1.2 ha (3.0 ac) riparian forest 0.2 ha (0.4 ac) oak woodland	48.4 ha (119.4 ac) grassland/vernal pool 1.3 ha (3.2 ac) riparian forest 0.4 ha (0.9 acre) oak woodland
Water Quality	178.3 ha (440.6 ac) footprint with 11 stream crossings	198.9 ha (491.5 ac) footprint with 9 stream crossings	196.3 ha (485.2 ac) footprint with 9 stream crossings	182.8 ha (451.7 ac) footprint with 9 stream crossings
Cultural Resources	Requires small amount of right of way from property eligible for National Register. Impacts to recorded archeological site	Requires small amount of right-of-way from property eligible for National Register.	Requires small amount of right-of-way from property eligible for National Register.	Requires small amount of right of way from property eligible for National Register.
Agricultural	51.1 ha 126.1 ac	102.5 ha 253.2 ac	95.5 ha 235.7 ac	84.4 ha 208.5 ac
Section 4(f) Use	If the archaeological site were determined to warrant preservation in place, then this alternative would affect a Section 4(f) property.	Yes 10.7 ha (26.5 ac)	Yes 10.7 ha (26.5 ac)	Yes 10.7 ha (26.5 ac)
Land Use/ Socio- economics	Residences: 20 Businesses: 2	Residences: 10 Businesses: 2	Residences: 14 Businesses: 2	Residences: 20 Businesses: 2
Right of Way Costs	\$34,000,000	\$20,000,000	\$20,500,000	\$22,000,000
Cost	\$159 million (min) \$185 million (max)	\$157 million (min) \$185 million (max)	\$186 million	\$194 million

Draft Environmental Impact Report/Statement

Chapter 2Proposed Alternatives



2.1.12 Preferred Alternative

All reasonable alternatives were developed to a comparative level of detail so their comparative merits may be evaluated. Based on early coordination and environmental studies, the D13 North Modification appears to be the likely Preferred Alternative. However, the final selection of a preferred alternative will not be made until the alternative impacts and comments on the draft EIR/S and from the public meeting have been fully evaluated.

An Alternative Analysis based on the earlier alignments; AA, A5, AAC2, A5C1, D1 and D13 was completed in 1998 in accordance with the Section 404 (b)(1) Guidelines and the NEPA/404 Integration Process. The purpose of the analysis is to evaluate the reasonableness and practicability of a number of alternatives for meeting the objectives of the project and provide documentation for the preparation of the Section 404 permit. The Section 404 (b)(1) Guidelines require that this analysis be adequate to identify the "Least Environmentally Damaging Practicable Alternative" (LEDPA). This was accomplished by comparing the alternatives for practicability, project purpose and overall environmental effects.

Based on the analysis, the D corridor alignments are less damaging than the A/C alignments, and the D 13 is less damaging than the D 1. Since the Alternative Analysis was completed, a modification of the D13 alignment was developed. The D13 North Modified is compared with the D 13 in Table 2-1.

The Alternative Analysis was distributed to our NEPA partners; however, they had no comments on it.

2.2 ALTERNATIVES WITHDRAWN FROM CONSIDERATION

The following alternatives were eliminated from further study for a variety of reasons that are included in the description of the alternative. Figure 2-6 shows the location of these alternatives.

2.2.1 The AA and A5 Alternatives

Since the AA and A5 alternatives were first developed, numerous housing developments have been constructed in the path of these alternatives. Consequently, the A alternatives impact quite a few more residents than the D corridor. Additional soundwalls could be required to protect the residents not directly affected (relocated) by these alternatives.

In addition, the AA and A5 alternatives will not alleviate traffic within the project area as outlined by the Purpose & Need. The D and AC corridors offer approximately the same benefit while the A corridor offers considerably less benefit. This is because the A corridor ties back into the existing two lane SR 65 which cannot accommodate the

Figure 2-6 Alternatives Withdrawn from Consideration

future traffic. The A alternative ties into SR 65 much further south than the D and AC corridors. Northbound traffic flowing from the A alternative must pass through the Wise Road and Riosa Road intersections on existing SR 65. These intersections will need to be controlled with a traffic signal and cannot accommodate the future traffic demand. Traffic on existing SR 65 will become congested. This congestion will deteriorate to the point that traffic will backup onto the A Bypass alternative. The D and AC corridors connect back to existing SR 65 north of the Riosa Road intersection and will not be delayed by this intersection. In addition, the A alternative has much higher delay and lower speed than the other alternatives.

There are several protected resources that would be affected by these alternatives. The A corridor (including AA, A3, A4 and A5) crosses through areas of high quality vernal pools between Nicolaus Road and the UPTC railroad tracks. Near the north connection with existing SR 65, Bogg's Lake hedge hyssop (*Gratiola heterosepala*), a California endangered plant species, has been found. In addition, a mature stand of oak trees is located within the A corridor near Nicolaus Road. A pair of nesting Swainson's hawks, a California threatened species, have been observed nesting in this stand of oaks.

In addition to not meeting the purpose of the project, the AA and A5 alternatives do not meet the design parameters that were agreed upon for this project. Below is a description of the AA and A5 alternatives.

Alternative AA

The "AA" line begins approximately 0.5 km (0.3 mi) south of Industrial Blvd. at KP 20 (PM12.5). The alignment curves in a northwesterly direction and proceeds over Industrial Blvd. and the Union Pacific Transportation Company (UPTC) tracks, intersecting Moore Road approximately 607 m (1992 ft.) from the Moore Road/Joiner Parkway intersection. The line turns in a northeasterly direction approximately 2.4 km (1.5 mi) west of the existing alignment. At Auburn Ravine, Alternative AA is just west of the (USGS topographical map) section line between sections 16 and 17.

At Nicolaus Road, the AA line was set approximately 335 m (1100 ft) east of Lakeside Drive. From Nicolaus Road, the A line continues on a north-northeast bearing until it nears the UPTC tracks where it curves to the left, proceeds over the railroad tracks and existing SR 65, tying back into the existing highway approximately 0.4 km (0.3 mi) south of Wise Road. The AA alignment is approximately 8.0 km (5 mi) long and terminates at KP 28 (PM17.3).

Alternative A5

The A5 alignment was created to avoid the Lincoln Airpark in the event it develops before the modified route is adopted. This alternative is 8.05 km (5.0 mi) long, beginning approximately 0.5 km (0.3 mi) south of Industrial Blvd. at KP 20 (PM12.5) and ending at

KP 28 (PM17.1). The alignment curves in a northwesterly direction and proceeds over Industrial Blvd. and the UPTC tracks. Near the section corner at Moore Road, the line turns in a northeasterly direction approximately 2.4 km (1.5 mi) west of the existing alignment. At Nicolaus Road the A5 line is approximately 247 m (810 ft) east of Lakeside Drive and 38 m (125 ft) east of the section line. At the north end of the project this alignment proceeds via grade separation over the railroad tracks and the existing highway, similar to the other A alternatives.

The A5 line impacts excellent quality wetlands near the beginning of the project, as well as an Oak woodland near Nicolaus Road. However, the A5 line does avoid the California Endangered Bogg's Lake hedge hyssop, located in vernal pools north of the existing highway.

2.2.2 Alternative A3

The A3 Alternative is another variation of the A line. A3 coincides with the A alignment in the southerly section of the project to Auburn Ravine. There it veers north, running parallel and west of the section line. North of Nicolaus Road, the A3 line continues on the west side of the section line. The alignment crosses over the railroad tracks and the existing highway, then turns in a northwesterly direction and conforms with existing SR 65. The A3 and A4 alignments were developed to minimize impacts on the biologically sensitive areas in the A corridor. This is based on the assumption that the area west of the section line has fewer protected resources than the area east of the section line. The A3 and A4 alternatives were dropped in favor of A5 which, at the time, affected less residential area.

From Auburn Ravine north, the A3 line impacts approximately the same amount of wetlands as the A line; however, the vernal pools are of lower quality. The A3 line avoids the area where the Bogg's Lake hedge hyssop was found.

At Nicolaus Road, the A3 line is approximately 168 m (551 ft) east of Lakeside Drive. Construction of Nicolaus interchange would require the closure of Lakeside Drive. Alternate access to the Lincoln Airpark could be provided by improving the connection to Fairway Drive located approximately 305 m (1000 ft) west of Lakeside Drive. Improvements to the interior streets in Lincoln Airpark would mitigate some of the effects of closing Lakeside Drive at Nicolaus Road.

Alternative A3 was withdrawn from consideration due to the need to close Lakeside Drive. The City of Lincoln strongly opposes the closure of Lakeside Drive. Closing Lakeside Drive would disrupt the planned subdivision including a loop golf course located just north of the Fairway Dr./Nicolaus Road intersection. Construction of Lakeside Drive was accomplished through an Assessment District. Relocating this road and utilities would alter existing easements and create a complex financial situation.

2.2.3 Alternative A4

The A4 alternative is a variation of the A line. South of the Auburn Ravine, the A4 line coincides with the A alignment. The A4 alignment generally runs to the west side of the section line, minimizing the impact on wetlands in the area. Approaching Nicolaus Road, the alignment shifts approximately 46 m (151 ft) east of the A3 line and 213 m (699 ft) east of Lakeside Drive. Construction of the A4 alignment would not require the closure of Lakeside Drive. A diamond/single loop interchange could be utilized at this location. The distance between the southbound ramps intersection and Lakeside Drive is 137 m (449 ft). Although this interchange configuration has less capacity than a partial cloverleaf, as in the A alternative, adequate capacity at the off-ramp intersection and nearby local intersections can be provided.

Alternative A4 removes more of the oak trees near Nicolaus Road than the A3 line, but substantially less than the A line, and wetland impacts are less than the A line. The A4 line has substantially less impact on vernal pools than the A line and also avoids the area where the Bogg's Lake hedge hyssop is found.

2.2.4 Alternative AFD

The AFD alternative considered future upgrading to an expressway/freeway from near Wise Road to north of Sheridan, if an A Corridor alternative was initially constructed. The AFD line would follow the entire A Corridor and rather than connecting with existing SR 65 at the north end of the A Corridor, the AFD line would proceed on a new alignment east of the existing highway. The AFD line would then cross the existing highway, approximately 3 miles south of Sheridan, where it would conform to the north end of the D Corridor alignments.

Another version of the AFD would be to upgrade the existing alignment from north of the A Corridor alignment to north of Sheridan. This alignment would require extensive frontage roads and right of way.

The AFD alignment was evaluated in the 1990 Stage II Project Work Program and was not considered feasible due to its high cost.

2.2.5 Alternative D2

The D2 alternative was developed in an attempt to reduce the impact on wetlands and residents in the southern portion of the project. This alignment begins 2 km (1.24 mi) south of the D1 line. The D2 line is roughly parallel to the D1 line upon leaving the existing alignment to near Nicolaus Road. North of Nicolaus Road, the D2 line coincides with the D1 alignment. The D2 alignment would require the removal of four to seven residential dwellings and possible soundwalls for approximately five dwellings. Based on a preliminary survey, the D2 line has a greater impact on dwellings and vernal pools than the D1 line. It is also longer and more remote from Lincoln and has a greater impact

on wetlands than the D1 line. For these reasons, the D2 was eliminated from further study.

2.2.6 Alternative D13 Dowd Modification

This alignment was developed in response to the Conservation Easement on the Canevari's property. The D 13 Dowd modification was developed at the same time as the D 13 North Modification. This alternative follows the D 13 alignment until it meets Dalby Road, where it curves east to join Dowd Road, meeting with SR 65 at Sheridan. Dowd Road would be widened and improved to accommodate the increased traffic, but would remain a two-lane road. The portion of the alternative along Dowd Road would not be access controlled.

The rejection of this alternative was based on safety and operation due to location of existing driveways which would interfere with the operation of the facility.

2.2.7 Alternative T

The T alternative upgrades the existing SR 65 alignment to four lanes. From Industrial Blvd. to Auburn Ravine and from Gladding Road to near Wise Road, a four lane expressway would be constructed on existing SR 65 alignment. From Auburn Ravine to Gladding Road, the T line proposed to provide four lanes plus a continuous left turn lane. This can generally be accomplished by eliminating on-street parking and narrowing the sidewalks from 3.6 m (12 ft) to 2.4 m (8 ft). One or two parking lots could be constructed on vacant land between the junction of SR 193 and Sixth Street, providing these properties do not develop first. Also, older houses on F Street (one block east) could be converted to parking.

Drainage throughout the downtown section would need to be updated to current standards. South of First Street, it is anticipated the entire structural section will need to be reconstructed.

Telephone poles throughout the town are located .9 m (3 ft) behind the face of the curb on the west side of the highway. In addition, a major natural gas junction valve is located east of the clay plant. This valve and possibly some of the gas line would require relocation. Railroad crossing gates would require reconstruction.

The primary disadvantage of this alternative is that it fails to satisfy the regional need for an adequate freeway system in the area. It does not alleviate the problems of numerous cross streets and driveways. Initially, widening to four lanes may reduce the accident rate at the numerous intersections in town. As Lincoln grows, traffic through the central business district will become more congested and it is anticipated the intersection accident rate will increase.

Constructing the four-lane section through the downtown area does not leave an option for future widening. The 10-year and 20-year LOS for four lanes downtown are

projected to be E and F respectively. After the 20-year design period, the only viable option to enhance the level of service and capacity will be to construct a bypass.

The Lincoln General Plan policy is to "promote and renew the existing central business district, in order to provide diversified business opportunities." Heavy traffic volumes associated with a four-lane facility, loss of parking and the removal of at least one existing business are not consistent with the General Plan.

Caltrans Transportation Concept Report (TCR) calls ultimately for a four-lane freeway on this section of highway. For the above reasons, this alternative does not satisfy the regional or local requirements for the State highway.

2.2.8 Alternative E

The E Alternative begins south of Industrial Blvd. similar to the A and D1 alignments. The E line turns in a northwesterly direction around the east side of Lincoln and proceeds through vacant land until it crosses SR 193. The terrain through this first section is flat to rolling hills and land use is primarily grazing. After crossing SR 193, the alignment proceeds northerly and crosses Auburn Ravine. North of Auburn Ravine, there are scattered houses and ranchettes. In this area the alignment turns in a westerly direction. The E line crosses Virginiatown Road and McCourtney Road in this area. The line passes along the north edge of the claybed prior to reconnecting with the existing facility. This alignment was developed as an alternative to the A alignment. The E alignment distance is approximately 4.2 km (2.6 mi) out of direction as compared to the existing facility. The traffic analysis indicates that a major portion of through traffic would exit the expressway and proceed through Lincoln to save time and distance travel. This alignment, therefore, does not satisfy the purpose and need of the project.

2.2.9 TSM (Transportation System Management) Alternative

The Transportation System Management and Travel Demand Management (TSM/TDM) Alternative was evaluated and eliminated as an isolated alternative in the Major Investment Study. This alternative covers a range of improvements and strategies that aim to reduce the demand on and increase the efficiency of the existing transportation system, including measures such as the expansion of park and ride facilities with connections to intercity transit bus service, ride matching, car/vanpooling and teleconferencing. The estimated cost is not available.

Other TSM measures include signal optimization, two way left turn lanes, right turn only lanes, parking prohibitions and outside the central core, shoulder widening, truck lanes, passing lanes and merge/ diverge lanes.

The TSM/TDM alternative received the fifth highest score in the evaluation of eight alternatives which included converting the existing highway to four lanes, a minimum bypass alternative, a two and four lane bypass alternative, commuter rail trip

diversion, intercity transit bus service and transportation system management and travel demand management (TSM/TDM). Given the City of Lincoln's low-density land uses and an economy of small business employers, TSM/TDM alternatives may only have limited applicability within the study area. Assuming five percent of the forecasted interregional commute traffic will divert from SR 65 to TSM/TDM applications within the study area, the benefits to SR 65 would be marginal.

Although the Intercity Bus Service and TSM/TDM alternatives scored low as independent alternatives, combined with an improvement such as the bypass alternatives, they would play an important role in the effective use of the overall transportation system.

A park and ride facility is included in the project, and will be located at the junction of Industrial Boulevard and SR 65. As a stand-alone project, the park and ride would not be capable of resolving the impacts from the projected increase in traffic.